AGRICULTURAL CREDIT IN DENMARK

By Walter Bauer

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Farm Credit Administration

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FARM CREDIT ADMINISTRATION

Economic and Credit Research Division

WASHINGTON, D. C.

Agricultural Credit In Denmark

By

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Contents

Page

Preface ---- IV

PART I. ECONOMIC ASPECTS OF AGRICULTURAL CREDIT IN DENMARK

Main characteristics of Danish agriculture ---- 1
Farm credit implications of the agricultural situation ---- 2
Development and structure of agricultural indebtedness ---- 5
  Statistical summary of development ---- 5
  Degree of indebtedness ---- 9
  Use of borrowed funds ---- 11
  Specific sources of agricultural credit ---- 14

PART II. ORGANIZATIONAL AND TECHNICAL ASPECTS OF THE AGRICULTURAL CREDIT SYSTEM

FARM MORTGAGE CREDIT

Mutual credit associations (Kreditforeninger) ---- 18
  Economic background and present status ---- 18
  Administrative organization ---- 19
  Financial structure ---- 21
  Lending policies ---- 23
  Effectiveness of the credit association system ---- 34
Mutual mortgage associations (Hypotekforeninger) ---- 37
Savings banks ---- 42
Other private mortgage creditors ---- 44
Government sources of mortgage credit ---- 46
  Mortgage Bank of the Kingdom of Denmark ---- 46
  Land settlement loans ---- 47
  Loans for land improvement and related purposes ---- 51
  Refinancing and debt-adjustment loans ---- 53

CREDIT NOT SECURED BY FARM MORTGAGES

Government sources of medium- and short-term credit ---- 57
  Crop loans ---- 57
  Production credit associations (Driftslaaneforeninger) ---- 57
Private sources of medium- and short-term credit ---- 62
  Various lenders ---- 62
  Cooperative Village Banks (Andelskasser) ---- 63
  The Bank for Cooperatives (Andelsbanken) ---- 64
  Bibliography ---- 67

Preface

The collection of material on phases of foreign agricultural credit most pertinent to particular operating problems confronting the Farm Credit Administration yields incidentally much general information which may prove of interest to students of agricultural finance and offer points of departure for further study. In view of this and also because comprehensive surveys of the organization, operation, and economic importance of agricultural credit systems in foreign countries have not been made in the United States since 1913,* the Farm Credit Administration has decided to publish reports incorporating such information. The first report, entitled "Agricultural Credit in Germany", emphasized particularly the accumulated farm mortgage experience of that country.

Denmark's agricultural credit system has been chosen for discussion in this second report not only because of widespread interest in the farm credit aspects of cooperative effort among Danish farmers, but also because Denmark ranks next to Germany in length of experience with specialized agricultural mortgage lending institutions. Perhaps in no other country has the existence of such institutions contributed as much to bringing about significant changes in the structure of agriculture; moreover in probably no other country has it been possible for agriculture to borrow as much capital on the strength of the intensity and other characteristics of the industry and to carry as large a debt per unit of land.

Numerous valuable suggestions from Dr. Einar Jensen, principal agricultural economist, Bureau of Agricultural Economics, and from Dr. William H. Moore, senior economist, Farm Credit Administration, are gratefully acknowledged as is the collaboration of Miss Julia Wooster, research assistant, in editing and preparing the manuscript for publication.

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* *(2)* All italicized numbers in parentheses refer to "Literature Cited" pp. 67–68.

PART I

Economic Aspects of Agricultural Credit in Denmark

MAIN CHARACTERISTICS OF DANISH AGRICULTURE [1]

IN years before the depression of 1930, Danish agriculture earned 23 percent of the estimated national income and owned 34 percent of the national wealth.[2]

Denmark's total area, which is roughly one-fourth the size of Iowa, consists of soils varying greatly in quality but on the whole rather poorly endowed by nature. Nevertheless, owing to a comparatively mild climate and favorable topography as well as to the remarkable skill and industry of the farmers, 75 percent of the total area is now devoted to agriculture. Of the remainder, 8 percent is covered by forests and 17 percent includes heath, dunes, and other land permanently or as yet unsuitable for agriculture.

Livestock production based upon arable farming is the chief branch of Danish agriculture so that in 1939 a comparatively large area, i. e., 83 percent of the agricultural land, was under crops and only 14 percent permanently under grass. Marshes and other low-lying pastures accounted for 3 percent. Cereals, among which oats, barley, and mixed grain (usually a mixture of oats and barley, sometimes with an addition of peas and vetches) are the most important, covered approximately 42 percent of the agricultural area, followed by clover and other green fodder crops with 23 percent, and root crops with 16 percent. The great bulk of the cereals produced is used for feed on the farm. In addition, considerable quantities of concentrated feedstuffs and even some cereals are imported to cover the requirements of the intensive livestock industry, which specializes in the production of butter, bacon, and eggs. Around 1930 when production and exports of these products reached their peak, approximately 90 percent of the butter, 85 percent of the bacon, and 70 per-

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[1] A detailed discussion of all pertinent aspects is contained in a standard work by Einar Jensen (*18*) and in (*26*).

[2] (*28, p. 114.*)

cent of the eggs produced were exported to foreign countries. Other livestock products and live animals also are exported.

Owners operate 94 percent of the number of farms, tenants 6 percent. Large estates are few. Although small holdings are numerically predominant, more than half of the agricultural area belongs to what is generally termed "peasant farms." The salient difference between peasant farms and small holdings is that most of the former would be large enough to provide work for the owner-operator, his family, and perhaps some hired labor if livestock production were abandoned, while under a similar assumption the latter would be too small to keep even the family fully occupied.

TABLE 1.—*Agricultural holdings according to size* [*1933*]

Size	Number	As a percentage of—	
		Total number	Total agricultural area
		Percent	*Percent*
Large farms (186 acres or more)	2,100	1	9
Peasant farms (25 to 185 acres)	91,000	44	64
Small holdings (less than 25 acres)	111,000	55	27
Total	204,100	100	100

Source: Taken from (*1, p. 15*). For statistics showing the distribution of 204,231 farms by more detailed size groups in 1933, see (*12, p. 44*). In the same source (*12, p. 131*), the total number of farms in 1937 is given as 201,741.

FARM CREDIT IMPLICATIONS OF THE AGRICULTURAL SITUATION

Following the epochs of peasant liberation and gradual transfer of land ownership to the peasantry, Denmark's agricultural plant as it exists today developed mainly within the span of four or five decades prior to 1914. During that period occurred most of the fundamental shift from grain economy to livestock economy of which there had been indications even before 1850. The number of cattle increased from 1.1 million in 1861 to 2.5 million in 1914, that of hogs from 304 thousand to 2.5 million, and the grain trade changed from a net export to a net import basis.

Not only the impact of American competition in grain but also various other factors contributing to the great agricultural depression in northwestern Europe during the years 1873–96 were responsible for the shift.[3] In no small measure was it accelerated by the growing industrial prosperity of England and Germany. In the course of time these two countries became Denmark's most important outlets for livestock products and in the end her degree of dependence was such that even minor changes in the economic situation of either country had some repercussions in the agricul-

[3] For an exhaustive analysis of the factors involved see (*18*).

tural situation of Denmark. However, as can be seen from table 2, no perilously large decrease in net returns from farming occurred until the last world-wide depression.

TABLE 2.—*Net returns per 100 crowns of agricultural capital, 1916–17 to 1937–38*

Year (July to June)	Based on the current commercial value of agricultural capital [1]		Based on the book value of agricultural capital [1]	
	Farms under 10 hectares (24.7 acres)	All farms	Farms under 10 hectares (24.7 acres)	All farms
	Crowns	*Crowns*	*Crowns*	*Crowns*
1916–17		7.3		9.2
1917–18		6.8	6.4	9.2
1918–19	7.3	8.3	11.1	12.7
1919–20	6.0	7.4	9.5	11.7
1920–21	4.9	5.8	7.4	8.2
1921–22		.9		1.2
1922–23	3.6	4.5	5.3	5.6
1923–24	6.0	6.1	8.8	8.1
1924–25	5.8	6.4	9.1	9.1
1925–26	1.6	1.2	2.3	1.6
1926–27	1.3	1.1	1.8	1.3
1927–28	1.1	1.5	1.5	1.8
1928–29	4.4	4.9	6.2	6.2
1929–30	4.8	4.3	6.5	5.6
1930–31	.8	.5	1.1	.6
1931–32	−.5	−.4	−.7	−.5
1932–33	1.4	2.3	1.9	2.9
1933–34	2.5	2.9	3.3	3.6
1934–35	2.7	3.1	3.7	4.0
1935–36	2.6	3.3	3.6	4.4
1936–37 [2]	1.1	1.9	1.5	2.5
1937–38	2.8	3.6	3.8	4.5
Average 1933–34 to 1937–38	2.3	2.9	3.2	3.8
Average 1916–17 to 1937–38 [3]	3.1	3.9	4.5	5.2

[1] The difference between the "commercial value" and the "book value" may be illustrated by the following figures:

	Commercial value per hectare (crowns)	*Book value per hectare (crowns)*
1929–30	3,107	2,409
1930–31	3,021	2,408
1931–32	2,825	2,377
1932–33	2,570	2,054
1933–34	2,449	1,948
1934–35	2,575	1,955
1935–36	2,697	2,025
1936–37	2,700	2,076
1937–38	2,809	2,203

[2] The low figure in this year was caused by the poor grain crops of 1936.
[3] The average for the period 1916–17 to 1937–38 is comparatively high because it includes the period of exceptional war-time profits.

Source: Compiled from (*24, issues 1916–17 to 1937–38*).

Throughout the long period of sizeable returns from farming, agricultural credit was granted freely and thereby the remarkable technical and commercial development of Danish agriculture was greatly facilitated. Concurrently the value of agricultural property rose and with it the mortgage debt. The rise in land values was accentuated particularly by the large returns from farming which prevailed during the 1914–18 war and for several years thereafter.

During and after the depression, the general shrinkage of international trade as well as far-reaching changes in the economic situation and policy of Denmark's two principal customers caused returns to remain at rather low levels so that it became increasingly difficult to service the mortgage debt contracted on the basis of appraisals in which continuation of large returns had been assumed. Despite currency devaluation to bolster exports, the Government was forced to attempt relief through certain forms of subsidization, moratoria, and debt adjustment.

The increase in net returns from −.5 in 1931–32 to 4.5 in 1937–38 was due to various circumstances, among which alleviation of the debt burden was perhaps the least significant. First, a domestic agricultural adjustment program curtailed the output of pork products and raised bacon prices through appropriate policies. Furthermore, the British bacon import restrictions had the result of raising prices in that market to such an extent that the income of farmers from bacon exports was not too seriously affected although the quantities exported were much smaller. The improvement of the export situation was not limited to bacon alone. In fact, the total value of agricultural exports gradually increased and reached 1.1 billion crowns in 1938 as against 886 million in 1932.

Yet, in view of the apparently permanent character of the preferential treatment accorded by Great Britain to Empire countries that compete with Denmark in the livestock products trade and of the German attempts at self-sufficiency, reestablishment of the economic environment in which Danish agriculture operated before 1914 could hardly be hoped for. Possibilities for return to a grain economy were even less conceivable owing to developments in competitive world agriculture as well as to the importance attained in domestic agriculture by the small holders who cannot give up any part of livestock production without impairing their status as full-time farmers. Therefore, Danish economists seemed to agree on the necessity of preserving the existing structure of the agricultural plant as much as possible and of preventing further expansion. At the same time it was assumed that Danish agriculture would be capable of servicing the existing long-term indebtedness provided exports were at least maintained and the cost of production did not rise above the 1938 level.

Before conditions were changed radically by outbreak of the European war and German occupation, it was believed that in the future, Denmark might be able to hold her own in the agricultural export trade by improving further the quality of her products, which usually are at a premium in foreign markets, and by adding new commodities to the export list. A case in point was the favorable development in the exportation of dressed poultry. To be sure, profits from an increase in the aggregate value of agricultural

exports should be shared more or less alike by all farmers. For this reason there seemed to be a tendency to emphasize the importance for farming of the butter-bacon-egg interdependence. In other words, specialization was no longer advocated, the theory being that these three branches of production if carried on by the same farm will always guarantee some income and debt-paying ability and that adjustment to changes in the demand for the three products may be brought about easily by shifts in the cow-hog-hen ratio per farm. The formation of production units having an optimum size for maintenance of the proper ratios was expected to necessitate some changes in the size of farms.[4]

Despite the more hopeful outlook regarding returns from agriculture during several years prior to 1939, there was no evidence of a substantial increase in debt repayment. Some of the Danish farmers were just beginning to breathe a little more freely, but not all of them. Even with the improvement in foreign trade that had taken place up to 1938, the position of the small farmers having less than 25 acres was still precarious. Table 2 indicates that net returns in this group are as a rule below the general average: they are, in fact, the lowest of all farm-size groups. In their case a further improvement of the export situation was imperative as apparently two other alternatives of relief were not feasible: Lowering taxes had been out of the question for several years and compulsory reduction of interest rates, which actually had been considered, was strongly opposed by investors.

The dilemma of Danish agriculture illustrates very well the dangers of easy long-term farm credit to those branches of agriculture that are mainly dependent upon exports and readily suffer from changes in the foreign competition and demand situation.

DEVELOPMENT AND STRUCTURE OF AGRICULTURAL INDEBTEDNESS

Statistical Summary of Development

In the absence of a continuous series of figures for total agricultural indebtedness before 1926, evidence of its trend must be secured from scattered data on the development of the farm-mortgage debt. In Denmark's case, requirements for short-term and unsecured credit presumably were fairly constant before the 1914–18 war owing to the fact that, as a unique livestock economy, Danish agriculture also enjoyed fairly constant receipts without being influenced greatly by the wide seasonal fluctuations occurring elsewhere in the production and

[4] The small farms having 25 acres and less, which in the past have been an important element in the Danish livestock industry, lean too much toward specialization, particularly in bacon production. Since the Government was cognizant of this disadvantage, it had been increasing for some time the size of newly created small holdings within its settlement scheme to around 37 acres.

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marketing of crops. Normally, short-term credit accounted for 20 percent or less of the total indebtedness.[5] However, frequently loans for medium and short-term purposes were—and still are today—made on mortgage security.

TABLE 3.—*Agricultural capital and mortgage indebtedness, 1885–1913*

Years	All farms [1]			Farms having a size exceeding 1 Td. Hartkorn [2]		
	Value of agricultural capital	Total mortgage debt		Capital assets per Td. Hartkorn	Mortgage loans from credit associations	
		Absolute amount	As a percentage of capital		Absolute amount per Td. Hartkorn	As a percentage of capital assets
	Million crowns	*Million crowns*	*Percent*	*Crowns*	*Crowns*	*Percent*
1885	3,450	1,275	36.96	7,799	3,920	50.26
1900	2,800	1,150	41.07	6,384	3,543	55.50
1909	3,310	1,417	[3] 42.81	8,550	4,358	50.97
1913	4,500	1,550	34.44	[4] 11,047	[4] 5,590	[4] 50.60

[1] Data assembled in various consular reports by Erland Gjessing, American Vice Consul, Copenhagen; the figures for agricultural capital are those of the Danish tax authorities and include real estate, livestock, and inventory.

[2] Calculations used by P. A. Callø, Credit Association Director, in (*7, p. 293*). Here too, capital includes real estate, livestock, and inventory, but its valuation is based on the current sale price of the farm per Tønde Hartkorn ("hard corn," e. g., rye, barley, or wheat) which actually is a dry-measure unit. However, in the old method of land tax assessment it represents a land valuation and tax unit based upon productivity; thus it equals a small area of fertile or a large area of poor land. On the average it takes about 24.5 acres to make up 1 Td. Hartkorn. Compare data in (*12, p. 40, table 45*).

[3] This figure is also quoted in the article by M. Hesselbjerg (*17, p. 411*). On the basis of the data published in (*11, year 1919, p. 130*), the farms and homesteads in rural districts which had debts were encumbered in 1909 to the extent of 49.4 percent of their value. According to (*14, p. 145*), about half of the total debt was contracted through credit associations.

[4] 1914.

The increase in the total mortgage debt of all farms from 1885 to 1913 was 21.6 percent according to Gjessing's figures and that for farms having a size exceeding 1 Td. Hartkorn (25 acres), 42.6 percent according to the Callø figures. It is not improbable that average indebtedness rose more rapidly on farms having over 25 acres as far as that part of the debt borrowed from credit associations is concerned.

The further advance of agricultural indebtedness is shown in tables 4 and 5.

TABLE 4.—*Mortgage indebtedness of all farms, 1917–26* [1]

Year	Million crowns	Year	Million crowns
1917	1,715	1922	2,664
1918	2,079	1923	2,717
1919	2,354	1924	2,755
1920	2,543	1925	2,837
1921	2,661	1926	2,782

[1] Not including South Jutland, a strip of territory ceded to Denmark by Germany in 1920.

Source: (*7, p. 300.*)

[5] (*18, p. 139.*)

TABLE 5.—*Agricultural capital and farm debt, 1926–38*

Years	All farms					Farms having a size exceeding 1 Td. Hartkorn		
	Mortgage loans from credit associations	Total mortgage debt [1]	Debt other than mortgage debt	Total farm debt	Mortgage debt as a percentage of total debt	Capital assets per Td. Hartkorn	Mortgage loans from credit associations: Absolute amount per Td. Hartkorn	Mortgage loans from credit associations: As a percentage of capital assets
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Million crowns	*Million crowns*	*Million crowns*	*Million crowns*	*Percent*	*Crowns*	*Crowns*	*Percent*
1926	1, 495	3, 032	296	3, 328	91. 1	17, 761	8, 760	49. 3
1927	1, 549	3, 151	407	3, 558	88. 6	15, 662	8, 492	54. 2
1928	1, 594	3, 234	452	3, 686	87. 7	15, 327	8, 993	58. 7
1929	1, 679	3, 463	280	3, 743	92. 5	16, 661	8, 961	53. 8
1930	1, 752	3, 602	338	3, 940	91. 4	17, 112	8, 907	52. 1
1931	1, 880	3, 734	490	4, 224	88. 4	15, 384	9, 116	59. 3
1932	1, 927	3, 742	498	4, 240	88. 3	12, 546	8, 553	68. 2
1933	1, 912	3, 834	445	4, 279	89. 6	12, 799	8, 507	66. 4
1934	1, 977	4, 110	260	4, 370	94. 1	14, 183	8, 783	61. 9
1935	1, 988	4, 113	227	4, 340	94. 8	14, 869	8, 735	58. 8
1936	1, 997	4, 126	199	4, 325	95. 4	15, 016	8, 568	57. 1
1937	1, 989	4, 125	307	4, 432	93. 1	----------	----------	----------
1938	----------	4, 200	700	4, 900	85. 7	----------	----------	----------

[1] This series of mortgage debt figures includes the capitalized amounts of certain annuities payable by farmers, such as dyke dues (Digeafgifter), tithes (Tiendeydelser: for explanation see p. 47, footnote 44), as well as annuities to the retired owner of the farm who continues to live on the farm in quarters specially assigned to him and receives in addition a sort of retirement stipend in cash or in kind (Aftaegter) as compensation for having relinquished the farm to his heir. The last-mentioned custom with its financial implications, no longer very widespread in Denmark, exists also in Germany (Altenteil) and is discussed more fully in an article by Henry W. Spiegel entitled "The Altenteil: German Farmers' Old-Age Security," Rural Sociology, Vol. 4, No. 2, June 1939.

In 1937 the total amount for such capitalized annuities was 107.5 million crowns, so that the figure for mortgage loans in the strict meaning of the term is 4.017 billion crowns.

Source: For columns 1 to 4 (*12, p. 132*), for columns 6 and 7 (*7, p. 293*).

NOTE.—Except for the data on farms having a size exceeding 1 Td. Hartkorn, the figures in tables 4 and 5 have been computed by the Government Bureau of Statistics (Det Statistiske Departement) on the basis of data obtained in 1909, 1926, and 1937 from special surveys of agricultural indebtedness and from the annual studies of farm business conditions made by the Bureau of Agricultural Economics (Det Landøkonomiske Driftsbureau). The 1938 figures in table 5 represent an unpublished estimate communicated by reliable contacts in Copenhagen.

From 1926 to 1931 the total farm debt increased by 896 million crowns, a much larger increase than that of 192 million crowns from 1932 to 1937. Furthermore, from 1926 to 1931 the mortgage debt owed to credit associations increased by 385 million crowns, that owed to other lenders by 317 million crowns; but, while from 1932 to 1937 only 62 million crowns was added to the mortgage debt owed to credit associations, that owed to other lenders grew by 321 million crowns. This was due partly to more widespread insistence on mortgage security for new personal loans and partly to "freezing" of such debts. In fact, since 1934 the debt not secured by mortgages has been generally at lower levels than previously.

However, indebtedness has grown faster since 1926 than suggested by the absolute figures if it is measured in terms of the value of agricultural capital, which shows a substantial decrease from 1926 to 1937. Data on capital values as determined by the Danish tax authorities regarding all farms are available, unfortunately, but for the few years indicated in table 6.

TABLE 6.—*Agricultural capital and farm debt, 1926–37*

Years	All farms					Farms having a size exceeding 1 Td. Hartkorn
	Value of agricultural capital	Total farm debt	Debt other than mortgage debt	Total mortgage debt	Mortgage loans from credit associations	Mortgage loans from credit associations per Td. Hartkorn as a percentage of capital assets per Td.
		As a percentage of capital				
	Million crowns	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
1926	6, 101	54. 5	4. 8	49. 7	24. 5	49. 3
1932	5, 400	78. 5	9. 2	69. 3	35. 7	54. 2
1936	6, 200	69. 7	3. 2	66. 5	32. 2	57. 1
1937	5, 449	81. 3	5. 6	75. 7	36. 5	

NOTE.—In connection with the percentages for the total mortgage debt in table 6, the following may be quoted from (*9, p. 45E*): "The agricultural mortgage debt in 1926 amounted to 50 percent of the value of the properties mortgaged and it is estimated that as a result of the fall in land values that has taken place since then, it has reached a still higher percentage. In 1933, the total mortgage debt on rural property was calculated as being 3,750,000,000 crowns, whereas the aggregate value of the farms was 5,400,00 ,000 crowns."

Source: The 1926–36 figures for the value of agricultural capital which includes real estate, livestock, and inventory were supplied in various reports by Erland Gjessing, American Vice Consul, Copenhagen. They represent values as appraised by the Danish tax authorities. The 1937 figure was taken from (*12, p. 131*). For absolute figures used in calculating the percentages, see table 5.

The growth of the farm mortgage debt in terms of the value of farm real estate (land and buildings) on all farms including those free of debt is shown in table 7.

TABLE 7.—*Value of farm real estate and mortgage debt, 1916–36*

Years	Value of real estate			Mortgage debt	Mortgage debt as a percentage of value of real estate
	Land	Buildings	Total		
	Million crowns	*Million crowns*	*Million crowns*	*Million crowns*	*Percent*
1916	2, 210	1, 188	3, 398	[1] 1, 715	50. 5
1920	2, 276	2, 924	5, 200	2, 543	48. 9
1924	2, 696	2, 057	4, 753	2, 755	58. 0
1927	2, 499	1, 991	4, 490	3, 151	70. 2
1932	2, 258	1, 942	4, 200	3, 742	89. 1
1936	2, 450	1, 950	4, 400	4, 126	93. 8

[1] 1917.

Source: Value of land and buildings are Danish tax authority appraisals as reported by Erland Gjessing American Vice Consul, Copenhagen in (*16*). For source of mortgage debt figures see tables 4 and 5.

The tax authority appraisals of farm capital appearing in tables 6 and 7 are generally claimed to be conservative and much below the current sale value. If measured in terms of the current sale value rather than the tax value, the mortgage debt would not represent such large percentages of the value of agricultural capital.

In the summer of 1938 mortgage indebtedness was believed to have reached its apex because there was little evidence of fresh borrowing and no need for it since the agricultural plant was not to be expanded further.

Degree of Indebtedness

Total indebtedness in 1938 was placed at 90 percent of the total value of agricultural capital (real estate, livestock, and inventory) if based on the comparatively low tax authority appraisal of 1937, and in the neighborhood of 60 percent if based on the 1937 total sale value of farms estimated at around 7 billion crowns. At the same time, it was said that indebtedness measured in terms of the capitalized net return from agriculture would probably be between these two figures.[6]

As shown in table 6 above, the total farm debt of 1937—the last year for which published statistics are available—amounted to 81.3 percent and the mortgage debt to 75.7 percent of the total farm capital as appraised by the tax authorities. If the value of debt-free farms is excluded from the national total for the value of farm capital, indebtedness is 84.1 percent, mortgage indebtedness 78.3 percent.

In 1937, farmers had nonagricultural assets such as bank deposits, securities, loans to others, etc., amounting to around 700 million crowns,[7] so that total net indebtedness would account for only 72.1 percent and the net mortgage indebtedness for 67.1 percent of the total assets in possession of agriculture, or for 74.2 and 69.1 percent, respectively, if the farms free of debt are excluded.[8]

Farms free from any debt in 1909 accounted for 10.2 percent of the total number, 11.6 percent in 1926, and as little as 3.7 percent in 1937. In the last-mentioned year the value of debt-free farms was 3.3 percent of the total value of agricultural property.

The distribution of farms by degree of indebtedness is shown in table 8.

In 1926, 59.3 percent of the farms were indebted to 60 percent or less of their value, but within one decade growth of indebtedness and drop in farm values were such that only 20.2 percent remained in that group. On the other hand, the number of farms in the group indebted to 85 percent or more of the value increased from roughly

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[6] Estimates by informed and responsible persons made verbally to the writer in Copenhagen, August 29 to September 7, 1938.

[7] (*6, p. 639.*)

[8] According to results of the sample studies made by the Danish Bureau of Agricultural Economics published in (*24, year 1937–38*), bank deposits, securities, and other nonagricultural assets amounted to 12.7 percent of the total assets in possession of agriculture, 87.3 percent representing strictly agricultural capital. In 1937 the 700 million crowns of nonagricultural assets mentioned in (6) represented 11.4 percent of the total assets in possession of agriculture.

TABLE 8.—*Farms having debts within certain percentages of the tax value,*[1] *1926 and 1937*

Percentage of tax value to which individual farmers are indebted	Number of farms as a percentage of— Total number		Number of farms as a percentage of— Number of indebted farms	Value of farms as a percentage of— Total agricultural capital	Value of farms as a percentage of— Capital on indebted farms	Indebtedness of farms: As a percentage of total farm debt	Indebtedness of farms: Absolute amount
	1926	1937	1937	1937	1937	1937	1937
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Million crowns*
Below 40	26.7	9.6	10.0	11.5	11.9	3.4	150.0
40–49	32.6	4.7	4.8	5.5	5.6	3.0	134.4
50–59		5.9	6.1	6.4	6.7	4.3	193.6
60–74	[2] 20.9	11.9	12.4	13.4	13.9	11.2	495.7
75–84		9.7	10.1	10.7	11.0	10.5	464.1
85–99	[3] 6.5	15.8	16.4	16.3	16.9	18.5	819.6
100–109	1.7	10.6	11.0	10.1	10.4	13.0	575.7
110 or more		28.1	29.2	22.8	23.6	36.1	1,559.6
Farms free of debt	11.6	3.7		3.3			
Total	100.0	100.0	100.0	100.0	100.0	100.0	4,432.7

[1] As assessed by the tax authorities, representing in 1926 real estate plus insured value of livestock and inventory; in 1937 real estate plus value of livestock and inventory appraised by the tax authorities. The valuation by the latter is always somewhat lower than the insured value.

[2] From 60 to below 80.

[3] From 80 to 100.

Source: Data for 1926 from (*16*); data for 1937 from (*12, p. 131*).

7 percent to 54.5 percent of the total number of farms.[9] In 1937 this group of farms represented 49.2 percent of the total value of agricultural capital and 50.9 percent of the value of capital on indebted farms. Finally, 67.6 percent of the total farm debt was owed by the farms having debts equal to 85 percent or more of their value.

This does not mean, however, that agriculture as a whole is indebted to such an extent that 67.6 percent of the total farm debt would fall within a degree of indebtedness of 85 percent or more of the value. As can be seen from table 9, only 16.1 percent of the total farm debt is in this range. It has to be taken into consideration that any farm which is indebted to 85 percent or more of its value is at the same time also indebted to 40 percent or less, to from 40 to 49 percent, etc. In other words, if a farm is worth 200,000 crowns and has a debt of 190,000 crowns, then 80,000 crowns fall within the degree of indebtedness of 40 percent or less, 20,000 crowns within the degree of 40 to 49 percent, etc. Measuring the combined debt of all farms in this fashion, the figures in table 9 are arrived at.

Medium-sized or typical peasant farms appear to be always less heavily indebted than either large or small farms according to the sample data (821 farms in 1937–38) collected annually by the Bureau

[9] According to (*17, p. 411*), in 1909, 8 percent of the farms had mortgage debts exceeding 80 percent of the value of the farm and 2 percent were indebted beyond 100 percent of the tax value.

TABLE 9.—*Distribution of total farm debt by degrees of indebtedness, 1937*

Percentage of total tax value of all farms	Absolute amount	As a percentage of total farm debt	Percentage of total tax value of all farms	Absolute amount	As a percentage of total farm debt
	Million crowns	*Percent*		*Million crowns*	*Percent*
Below 40	2,008.1	45.3	75–84	295.8	6.7
40–49	450.2	10.2	85–99	332.7	7.5
50–59	417.4	9.4	100–109	150.4	3.4
60–74	546.2	12.3	110 or more	231.9	5.2
			Total	4,432.7	100.0

Source: (*12, p. 131.*)

of Agricultural Economics (Det Landøkonomiske Driftsbureau). In table 10 is shown the distribution of indebtedness for the latest year for which such data are available.

Similar conclusions, particularly as far as small farms are concerned, may be drawn from the figures presented in table 11.

TABLE 10.—*Degree of indebtedness by farm sizes, 1937–38*

Description of debt	Farms having a size in hectares [1] of—						
	Less than 10	10–19	20–29	30–49	50–99	100 or more	All farms
Mortgage debt as a percentage of farm capital [2]	71.9	64.5	61.4	58.7	65.4	73.3	63.8
Total debt as a percentage of total assets [3]	78.1	68.2	63.5	61.1	68.9	70.9	66.2

[1] 1 hectare=2.471 acres.
[2] Farm capital=real estate, livestock, inventory.
[3] Total assets=farm capital, nonagricultural fixed capital, bank deposits and securities, claims outstanding for delivery of farm products, cash on hand.

Source: (*24, year 1937–38, p. 145.*)

TABLE 11.—*Degree of farm indebtedness by land value size groups, 1937*

Description of debt	Farms whose land is valued at—			All farms
	Less than 10,000 crowns	10,000 to 50,000 crowns	More than 50,000 crowns	
Mortgage debt as a percentage of farm capital [1]	82.9	72.4	73.0	75.7
Total debt as a percentage of farm capital [1]	90.4	77.4	77.0	81.4

[1] Farm capital=real estate, livestock, inventory.

Source: (*12, p. 130.*)

Use of Borrowed Funds

The size of the Danish farm debt as well as the strain and even incapability of servicing it under the economic conditions prevailing since the depression seem to substantiate the frequent contention that Danish agriculture is overcapitalized. However, some consideration

should be given to the question of whether the farmer was simply the victim of uncontrollable economic developments which first induced him to make large investments and later greatly restricted his receipts, or whether in some way he has contributed voluntarily to such overcapitalization.

There is, for example, the fact that farmers although not actually in need of a loan mortgage their property to increase its salability among other reasons.

To what extent this practice prevails is not exactly known, but since in addition to the quotations given below it was confirmed in several interviews with persons in the mortgage banking field, it is probably not altogether unimportant.

A. C. Kaarsen states in (*19, p. 48*) that "it will be considerably more difficult eventually to sell an unmortgaged property." Also Jens Warming (*28 p. 116*) says: "The farmer is more frequently a debtor than a creditor, because as a rule he prefers to have his property mortgaged, even if he is in a position to pay off the mortgage debt"; and Einar Jensen (*18, p. 136*): "But even farmers very well off will leave a mortgage on the farm for practical reasons."

A quotation from Sven Clausen (*8, pp. 98–99*) may explain some of the practical reasons farmers might have for mortgaging the farm. In this connection it must be mentioned that the mutual credit associations, which are the principal source of mortgage credit in Denmark, make loans not in cash but in bonds to be sold by the borrower at his own risk. These bonds usually are quoted below par on the stock exchange, although as a rule they are redeemed at par: "The borrower frequently keeps the bonds. He may do so in the interests of his family (division of his estate) and sometimes for an apparently peculiar purpose in connection with the technique of tax assessment. The borrower may reason as follows: The income from the coupons [of the bonds] equals the interest charge on the mortgage * * *. The only loss incurred by the debtor is his contribution to the cost of administration [of the credit associations; for details, see pp. 30–31]. On the other hand, when the debtor declares his capital to the tax authorities it is his privilege to deduct the amount of the mortgage at its nominal value from the value of his real estate, while he may declare his bonds at their current stock exchange value. [This means that a farmer whose real estate is valued by the tax authorities at 20,000 crowns and who has taken a mortgage of 10,000 crowns pays taxes on 10,000 crowns of real estate. If the bonds are quoted at 80, he pays taxes only on 8,000 instead of 10,000 crowns. His total taxable assets have been decreased thus by 2,000 crowns.]

"Furthermore, the borrower may benefit from the fact that his bonds may be drawn for redemption in cash by the association, even though he cannot determine [in this case] an exact amount of profit because he did not acquire the bonds by purchase. We shall throw light upon this question by the following hypothetical example: A borrower mortgages his property at 1,000 crowns; the bond price is 50; the borrower keeps the bonds. Later on the bonds are drawn by the association for payment in cash. Assuming that the bond price remained unchanged, the borrower will receive interest on 2,000 crowns if he purchases [new] bonds for his cash, while he paid interest on a mortgage debt of only 1,000 crowns. To mortgage a property and to keep the bonds may under certain favorable circumstances represent an inexpensive form of lottery gambling."

For similar reasons, mortgages are not paid off as rapidly as possible by advance installments, so that farmers are found to have considerable amounts on deposit in savings banks and invested in bonds.[10] Transformation of fixed capital into circulating capital also takes place in connection with the settlement of coheir claims. It is the tradition of Danish farmers to prevent subdivision of small and medium-sized farms by making the property over to one heir, who compensates the others for their share. Unless the cash settlement received by coheirs is invested in the purchase of another farm, such capital is definitely withdrawn from agricultural uses, but continues to encumber agriculture either in the form of a mortgage loan obtained for cash payment to coheirs or of a simple inheritance mortgage whose interest reverts to someone living in a city or having a nonagricultural trade in a rural district.[11]

The portion of the total mortgage debt consisting of purchase money and inheritance mortgages is presumably considerable because in view of the small number of tenant farms, it is evident that in Denmark "mortgage indebtedness is the alternative to tenancy," and also because "in normal times when there are no violent booms or slumps in farm values, it is sufficient for the farmer to own a fraction of the value of the farm."[12] Since farm mortgage credit is easily accessible, believed to be cheap, and not always explicitly restricted to agricultural operations, just as in many other farming communities throughout Europe, mortgage loans rather than other funds are used to defray nonagricultural expenditures such as the commonly unavoidable dowry for a daughter or the education of a son. By the same token, loans expected to have a bearing on the productivity of the farm and repayable within a short or medium term, considering the nature of and the return from the investment, often take the form of real estate mortgage credit and are liquidated over comparatively long terms instead. As liberal extension of credit in Denmark has made agriculture very sensitive to business cycle movements at home and also abroad through the high degree of dependence on agricultural exports, farmers are likely to suffer from the rigidity of mortgage amortization schedules more than they would if real-estate capital were not mobilized in this fashion. Finally, some of the apparent overcapitalization is due to excess investments in land improvement and especially in buildings.[13]

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[10] E. Cohn in the Jubilee Report of the Kolding Savings Bank, 1931, as quoted in (*28, pp. 116–117.*)

[11] In Germany a similar situation has been one of the reasons for enactment in 1933 of the Hereditary Farm Law which establishes for farms of determined sizes the principle of sole inheritance and prohibits mortgaging of the property for any purpose, including that of settling coheir claims. For details see (*5, pp. 41–43*).

[12] (*18, p. 143.*)

[13] (*18, p. 136.*)

The relatively unimportant amount of debts other than mortgage loans includes some merchant credit, operating credit (short and medium term) extended to farmers by the Government and other lenders as well as funds borrowed for various purposes which it would be difficult to define.

Specific Sources of Agricultural Credit

Origin of capital invested in agriculture.—Only during the period from about 1830 to 1880 did capital accumulation in Danish agriculture exceed requirements. Before and after this period, and particularly during the latter stages of transition from grain to livestock economy toward the end of the nineteenth and the beginning of the twentieth century, capital requirements were covered largely from nonagricultural domestic sources and from abroad. Most instrumental in attracting domestic capital were the mutual credit associations (Kreditforeninger), whose bonds—secured by urban as well as farm mortgages—represent from 70 to 80 percent of all Danish bonded securities and close to 90 percent of the volume of mortgage bonds.

A study of credit association bond distribution made in 1932 [14] showed that 52.1 percent of the bonds were held by private individuals, 10.8 percent by insurance companies, 8.6 percent by savings banks, 7.2 percent by the National Trust Institute, 4.4 percent by commercial banks, 3.6 percent by the credit associations themselves. Various institutions, foundations, and trust funds of a more or less public character accounted for the remainder of 13.3 percent, which included 1.1 percent held by the Mortgage Bank of the Kingdom of Denmark.[15]

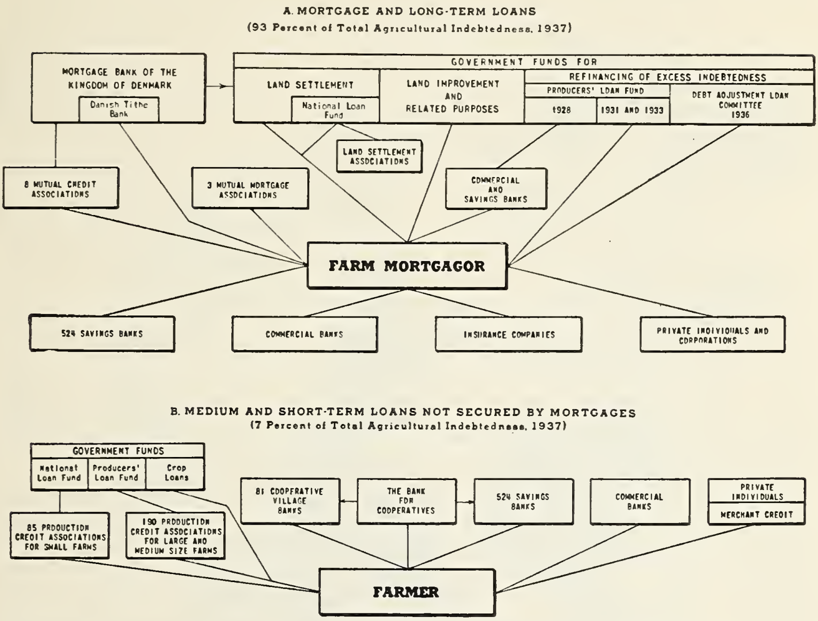
One of the functions of the latter is to buy bonds of the credit associations, to issue its own bonds on such security and to sell these preferably abroad, in other words, to assist in and to centralize the provision of foreign capital for the credit associations. Another function is to obtain part of the capital required by the Government in land-settlement schemes through a similar procedure of bond purchase and sale. Bonds acquired in these connections by the Bank since its inception in 1906 up to 1937 constitute 1.1 percent of the total 1937 mortgage indebtedness.[16] Even assuming that an equivalent amount of Mortgage Bank bonds was sold abroad, it appears that foreign funds flowing into Danish agriculture for mortgage credit through this particular channel are not very large. However, several credit associations have sold bonds abroad without intervention of the Mortgage Bank and

[14] *(22, pp. 34 and 183.)*

[15] Discussed more fully on p. 46.

[16] Calculation based on data contained in (*4*). In 1938, J. Selvejer, Director of the Mortgage Bank, stated that the portfolio of farm-mortgage bonds represented from 2.5 to 3 percent of the total farm-mortgage bonds in circulation.

Figure 1.—**Sources of Agricultural Credit**



Note: The page numbers given below refer to the discussion of sources shown in the chart.

Mortgage Bank of the Kingdom of Denmark: A, p. 46.
Danish Tithe Bank: A, p. 47.
National Loan Fund: A, p. 50; B, p. 59.
Land Settlement Associations: A, p. 50.
Producers' Loan Fund:
- 1928: A, p. 53; B, p. 62.
- 1931: A, p. 54.
- 1933: A, p. 55.

Debt Adjustment Loan Committee: A, p. 56.
Mutual credit associations: A, p. 18.
Mutual mortgage associations: A, p. 37.
Savings banks: A, p. 42; B, p. 62.
Commercial banks: A, p. 45; B, p. 62.
Insurance companies: A, p. 45.
Private individuals and corporations: A, p. 45; B, p. 62.
Crop loans (Ministry of Agriculture): B, p. 57.
Production credit associations for small farmers: B, p. 58.
Production credit associations for owners and tenants of farm property [large and medium-size farms]: B, p. 60.
Cooperative village banks: B, p. 63.
Bank for Cooperatives: B, p. 64.
Merchant credit: B, p. 62.

introduced them for current quotation on foreign exchanges. Data on other foreign investments in Danish agriculture are not available.

Real estate mortgage loans.—Table 5 shows that since 1926 most credit has been against mortgage security. In 1937 when the percentage of mortgage credit and other long-term encumbrances reached 93 percent of the total farm debt, the estimated share of the various creditors was as shown in table 12.

The decrease in the percentage of mortgage credit supplied by unspecified lenders is in reality not as great as the figures indicate because in 1909 the unspecified group included some Government

TABLE 12.—*The mortgage creditors of Danish agriculture, 1909 and 1937* [1]

Source of credit	1909	1937
	Percent	*Percent*
Mutual credit associations	43	49
Mutual mortgage associations	1	1
Savings banks	15	18
Commercial banks	2	4
Insurance companies	1	(2)
Government agencies	(3)	9
Unspecified	[4] 38	[4] 19
Total mortgage loans outstanding	100	100

[1] Capitalized annuities not included; for details, see table 5, footnote 1.
[2] 0.5 percent.
[3] Included with "unspecified."
[4] Private individuals accounted for 20 percent in 1909.

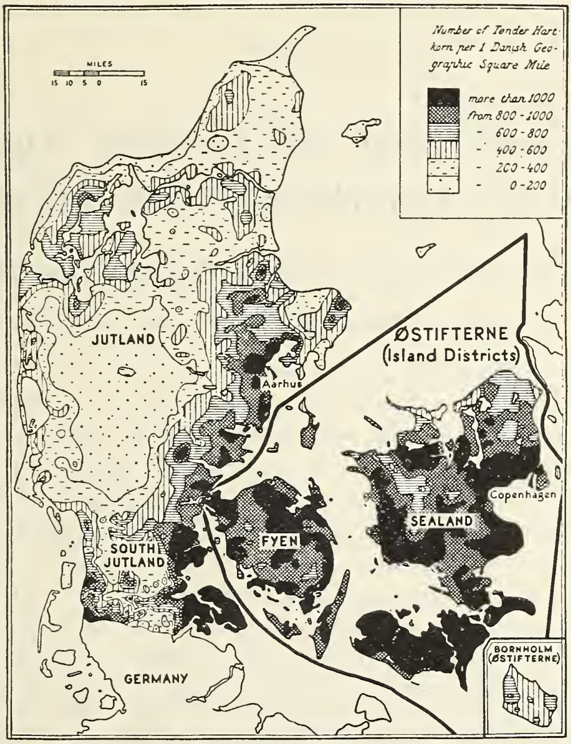
Source: 1937 from (*12, p. 130*), except for insurance company figure which was reported by Erland Gjessing, American Vice Consul, Copenhagen, in (*16*); 1909 from (*1, p. 24*).

loans made in connection with land settlement dating back to 1899. Most of the other creditors show an increase, for which in part at least a decrease in lending by individuals is responsible.

No exact percentages can be given for loans made against first and junior mortgage security. As the mutual credit associations (Kreditforeninger) insist on first-mortgage security and the same principle is followed as far as possible by savings and commercial banks as well as insurance companies, it is certain that more than 50 percent of mortgage credit consists of first-mortgage loans. On the other hand, savings and commercial banks have many loans on junior mortgages, while the mutual mortgage associations (Hypotekforeninger) specialize in making second-mortgage loans. As far as can be ascertained the great bulk of private loans is made on junior mortgage security and also some of the Government loans take second or even third and fourth place.

Loans other than mortgage loans.—In 1937 the amount of loans not secured by real-estate mortgages accounted for only 7 percent of the total indebtedness. As mentioned previously, the Danish farmer prefers to receive production credit in the form of mortgage loans, and lenders also have increasingly asked for such security since the depression. Besides Government funds to finance production credit associations (Driftslaaneforeninger), the most important sources for personal loans are local savings banks (Sparekasser), cooperative village banks (Andelskasser) and local commercial banks. Statistical data for the share of these groups in the total of loans not secured by real estate are lacking. The government has an appropriation of 12.9 million crowns to make loans through production credit associations. If the entire amount had been employed by 1937, the Government share in the total volume of loans other than mortgage loans would be 4.2 percent.

FIGURE 2.—**Distribution of Land Values**



Adapted from Einar Jensen (18, p. 77). The map shows the farm valuations for tax assessment under the old system in vogue until 1905. The value of farms is expressed in "Tønder Hartkorn" (for explanation of this unit, see table 3, footnote 2) as a measure of the productivity not solely of the soil but of the farm as a going concern under normal utilization with normal buildings, livestock, and labor. The contours of this map coincide rather closely with those of soil maps, for example that on page 72 of Jensen's work.

Merchant credit undoubtedly constitutes a significant portion of the personal debt. According to the annual sample studies of the Bureau of Agricultural Economics, it averaged 27.4 percent of the total indebtedness not secured by mortgages over the period from 1922–23 to 1936–37. On small farms merchant credit plays a somewhat more important role because during the same period on farms having less than 25 acres, it averaged 31.8 percent.[17]

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[17] (*24, years 1922–23 to 1936–37.*) Jens Warming (*28, p. 113*) says, however, that the figures are "hardly representative," probably because they are based on sample studies. In fact, table 5 shows that debts other than mortgage debts accounted in 1937 for 6.9 percent against 14.1 percent as given by the Bureau for 1936–37.

Part II

Organizational and Technical Aspects of the Agricultural Credit System

MUTUAL CREDIT ASSOCIATIONS (KREDITFORENINGER)

Economic Background and Present Status

WITH the growth of free ownership of land which followed the agrarian reforms of the eighteenth century, it became necessary to provide for institutional long-term credit to new owners. Such lending institutions as existed during the first half of the nineteenth century did not prove adequate and some exploitation of farmers by private lenders seems to have occurred.[18] The suggestion made in 1839 by an economist named Bergsøe to create land credit associations similar to the German Landschaften received a great deal of attention in the farming community, for until then comparatively little was known in Denmark about the structure and organization of these institutions, although six of them had been in existence since the latter part of the eighteenth century. The large groups of farmers which met for discussion of the proposal in 1845–46 were particularly impressed with the nonprofit feature of Landschaft lending. Owing to the widespread interest in the new plan, a law was passed by Parliament in 1850 which made possible the formation of similar cooperative credit associations among owners of rural as well as city real estate for the purpose of obtaining funds loanable to their members by the issue of mortgage bonds. However, while in Germany there is a strict separation between land credit associations (Landschaften) and urban real estate credit associations (Stadtschaften), in Denmark some of the associations mix urban and rural credit to a varying degree as may be seen from table 13.

[18] A brief account of institutional credit during that period is given in (*20, pp. 112–114*). For details on a State land bank established in the eighteenth century see also (*18, pp. 125–127*).

TABLE 13.—*Mutual credit associations, 1937–38*

Name	Date of foundation	Total loans outstanding	Farm loans outstanding	Farm loans as a percentage of total loans
		Thousand crowns	*Thousand crowns*	*Percent*
1. Jydsk Landkreditforening: Land Credit Association of Jutland	1851	748	748	100
2. Vest-og Sønderjydsk Landkreditforening: Land credit association of West and South Jutland	1860	366	366	100
3. Østifternes Landkreditkasse: Land credit association for the Islands	1866	269	269	100
4. Østifternes Kreditforening: Mutual Credit Association for the Islands	1851	1, 382	166	12
5. Sønderjyllands Kreditforening: Mutual Credit Association of South Jutland	1920	177	161	91
6. Fyens Kreditforening: Mutual for the Island of Fyen	1860	163	53	33
7. Jydsk Husmandskreditforening: Mutual of Jutland for Small Owners	1880	457	203	44
8. Østifternes Husmandskreditforening: Mutual for Small Owners on the Islands	1880	103	24	23
Subtotal		3, 665 [1] (2, 282)	1, 990 [1] (607)	54 [1] (27)
9. Five credit associations not lending on farm real estate [2]	before 1900	1, 217	0	0
Grand total		4, 882	1, 990	41

[1] Associations having mixed rural and urban business.
[2] Including 1 association making loans on industrial property only.

Source: For dates of foundation (*20, p. 121*); for other data (*12, pp. 126–127*).

Administrative Organization

Membership in a mutual credit association is acquired exclusively by borrowing from it.[19] The borrower ceases to be a member upon full repayment of the loan after the accounts of the association for the fiscal year have been approved by the Ministry of the Interior, provided that the reserve fund of the association equals at least 3 percent of the total amount of bonds in circulation. If such is not the case, the borrower continues to be a member and has to furnish security for his share in the joint liability by depositing with the association government or credit association bonds or other securities approved by the Ministry of the Interior. Membership also ends if the association has to foreclose on the borrower's property for failure to repay the loan in accordance with the conditions specified.

According to the act of 1850, the association is a private, self-governing, cooperative enterprise. Executive management is in the hands of a board of directors, appointed by a "board of representatives" from the different subdivisions of the lending area of the association. This board of representatives, or rather control, is elected through majority vote of the members in general assembly, which is normally called once a year and in which plural voting is the rule. As the associations finance their loans through bond issues, in some

[19] In some of the German Landschaften nonborrowers are also members. For details see (*5, p. 59*).

of them the bondholders also have votes.[20] The control board supervises the directors—in the larger associations by constant and current contact, in the smaller associations by more or less infrequent meetings—and has the right to suspend them.[21] It also appoints the association auditors, of whom there must be at least two, and the appraisers. Other functions of the control board are to fix salaries and issue instructions regarding appraisal and lending policies in general. However, it appears that in actual practice management is predominantly in the hands of the directors, who have the approval of the board as a matter of course.

Government supervision of the associations was originally restricted to approval of bylaws and annual balance sheets. The law of April 7, 1936, on credit associations widened Government influence by stating that "the Minister of Interior supervises the amount of loans and the basis on which they are to be granted by the association." This means that the Government is now enabled not only to supervise the general business of the associations but also actually to control the details of lending policies such as interest rates, appraisal, and loan sums. Moreover, one of the association auditors is henceforth appointed by the Minister as, incidentally, always had been the case with the two associations making loans on small farms (Nos. 7 and 8 in table 13). Although so far there is no evidence of radical interference with association management on the part of the Government, its passive role has been abandoned to some extent. A committee under the Ministry of Interior has been set up to study the financing methods of the associations with a view to improving them and official reports are being published for the benefit of bondholders. Thus it is hoped to induce the associations to adopt such policies as might be suggested by the Government. The aforesaid law obliges the associations also to make land-improvement loans which until 1937 were granted by the Government.[22]

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[20] For example, in one of the associations members have one vote if they have loans up to 30,000 crowns, two votes with loans up to 50,000 crowns, etc., but no more than five votes with any loan exceeding 90,000 crowns. Bondholders are never given more than three votes at the maximum regardless of the number of bonds held. A committee under the Ministry of the Interior making recommendations regarding the organization of credit associations in 1936 rejected the idea of making participation of bondholders a universal practice. "This provision could only be recommended if the borrowers were released from their liability for losses incurred by the management not elected by them, but in that case it would be necessary to abolish the credit association principle of mutual liability and return to the system of mortgage banks or to organize a state mortgage bank" (*22, p. 44*).

[21] Formerly directors were appointed for 6-year terms; in more recent years, for indefinite periods or for life. The president of the board of directors is required to have legal training; of the other directors, one or several must be experts in the field of mortgage banking. In the two associations making loans to small farmers (nos. 7 and 8 in table 13), the choice of the president of the board of directors must be approved by the Ministry of the Interior.

[22] For details, see p. 52.

Financial Structure

The loanable funds of the associations are obtained exclusively through the issue of bonds secured chiefly by first mortgages on the property of the borrowers. Mortgages in favor of a credit association may not be transferred to third parties nor can individual mortgages be seized by anyone having a claim against the association. The volume of bonds outstanding may never be in excess of the residual unpaid amount of the mortgages held. As the association is the debtor of the bondholder, its other assets also serve as security for the bonds.[23] Finally, bonds are jointly and severally guaranteed by the borrower-members, that is, one borrower may be compelled to pay on behalf of others, the main restriction being that liability over and above his actual or residual debt to the association cannot exceed two-thirds of his original principal.

Prior to 1936, when the provisions of the act of 1850 were changed, members were jointly and severally liable to the extent of the full appraised value of their property, provided they had obtained a loan equal to three-fifths of that value; or in the same ratio to the amount borrowed if this constituted a lesser fraction of the appraised value. However, owing to the effect of the financial crisis of 1857–58 on borrowers, the liability of members was restricted to some degree in 1861 by an amendment to the basic law which provided that association bonds might be issued in series in such a way that a borrower's liability would apply only to the bonds of the particular series to which his mortgage was tied. This restriction is still in effect. According to the law of April 7, 1936, a series may be closed only after it contains a minimum of 6,000,000 crowns. Bonds of a series in process are protected by the stipulation that until such series has reached the amount of 4,000,000 crowns, the members of the immediately preceding closed series and the members of the series in process are liable for the bonds of both series.

After a loan has been repaid in full, the joint liability is not discharged until the balance sheets of the association for the fiscal year have been approved by the Minister of the Interior as meeting the requirements for the security of the loans of the series.

Despite this supervision the Government does not guaranty the security of association bonds. To be sure, Government guaranty of

[23] On March 31, 1938 (end of fiscal year 1937–38), the security of the bonds of the eight associations making loans on farms was constituted roughly as follows:

ASSETS	Thousand crowns	LIABILITIES	Thousand crowns
Mortgage loans outstanding	3, 664, 968	Bonds in circulation	3, 653, 733
Reserve funds	161, 313		
Other assets	166, 847		
Total	3, 993, 128	Total	3, 653, 733

interest due on bonds, although not tantamount to outright bond guaranty, has practically the same effect on the investor's opinion regarding the security of the bonds. This privilege was enjoyed until 1936 by the two associations created for the express purpose of granting loans on small farms (Nos. 7 and 8 in table 13). It was given also to the credit association of South Jutland in connection with some of its bond series, because this association, created in 1920 to serve the territory ceded by Germany to Denmark, needed support in marketing its bonds. As a result of Government guaranty, quotations for the issues of these associations were normally higher than for those of other associations. The reorganization law of 1936 extended Government guaranty of interest payments on bonds to the extent of 4 percent to other associations including the eight making farm loans. An indirect Government guaranty of association bonds exists for that amount which the Mortgage Bank of the Kingdom of Denmark acquires for further issue of its own bonds,[24] as all bonds issued by the Mortgage Bank carry direct Government guaranty. Owing to their comparatively well-founded security the association bonds, which may be either registered or made out to the bearer, are admitted as legal investments for trust funds of minors and of public institutions. They are also exempt from stamp and capital transfer taxes.

Bonds are issued by handing them to the borrower for sale in the open market. The amount of cash realized on bonds having a high coupon rate is of course larger than the net obtainable on bonds with a low coupon rate. In this connection, the series system which was designed primarily to restrict the liability of the borrower has been amplified by the associations in that they created within one bond series two or more subseries carrying different coupon rates and thereby different nominal interest rates on the mortgage loan involved. Thus, borrowers have an opportunity to choose not only the nominal interest rate they will pay during the life of the loan, but also the size of the discount they will have to accept in selling the bonds.

Redemption of the bonds is effected ordinarily at par value by drawings during a scheduled loan-amortization period which is 60 years at the maximum. Some credit-association bonds are redeemable at 110 percent. In 1932 their volume amounted to 0.7 percent of the total. Extraordinary redemption by using surpluses to purchase bonds below par in the open market is permitted and actually practiced by some associations. Borrowers, too, may participate in the withdrawal of bonds by purchase in the market for the purpose of making advance installments on principal. For the issue of bonds redeemable in less than 30 years, special permission from the Ministry

[24] For details, see p. 46.

of the Interior is required. However, the text on the bonds never contains the stipulation that they are uncallable on the part of the association. In some series it is promised that the coupon rate will not be lowered.

The associations have no share capital. In the case of those making farm loans, the new member has to make a contribution to the reserve fund of from 1.5 to 2 percent of the principal. Borrowers are likely to increase their reserve-fund share beyond this initial contribution by annual payments, for, as will be explained more in detail below, any part of the borrower's semiannual interest payments in excess of the interest due on the bonds and administrative expenses of the association are allocated to the reserve. When a member has repaid the loan, his share of contributions to the fund is returned. In 1937–38 the reserve fund of the associations making farm loans averaged 4.4 percent. Larger reserves are apparently considered unnecessary, because the law itself specifies that with associations making farm loans, the fund need not exceed 5 percent of the amount of bonds outstanding. If it should amount to more than this figure, the association may use the surplus to reduce the debt of the members. With the consent of the Minister of the Interior, the reserve fund may be reduced to 3 percent. On the other hand, if losses should be such that the reserve fund would amount to less than 1 percent of the amount of bonds outstanding, special contributions may be levied upon the members to bring it up to the required percentage.

Lending Policies

As may be seen from the names of the associations given in table 13, *limitation to specific geographic areas* in lending is intended. Coexistence of associations in one area means that there are possibilities for competition with a view to gaining members. Agreements on loan conditions supposedly eliminate such competition.

For credit associations the law prescribes a *maximum loan limit* of 60 percent of the value determined by appraisal on the basis of farm real estate prices prevailing at the time of loan application. If livestock and inventory are covered by the mortgage, their estimated value for purposes of determining the loan limit may not exceed 10 percent of the value of real estate.[25] In the case of straight-term or partly

[25] For example, on a farm with a total value of 100,000 crowns, of which 80,000 crowns are real estate and 20,000 crowns livestock and inventory, the admissible association mortgage loan would be 52,800 crowns, while on another farm equally valued at 100,000 crowns, of which 40,000 crowns are real estate and 60,000 livestock and equipment, it would be only 26,400 crowns. On the one hand, this practice, which in fact had been followed customarily by the associations before it was definitely established as a legal ruling in the 1936 act, enables the borrower to capitalize on assets other than real estate within a long-term amortization loan scheme; on the other hand, as a safeguard it makes the value of these assets for lending purposes progressively smaller as their actual value increases.

amortizable mortgage loans (discussed more fully on p. 33) the maximum loan limit is 50 percent of the appraised value. In theory the associations have always been cautious as they rarely go beyond 50 percent even in those cases where the law admits 60 percent, but in reality they have gone even beyond the maximum as a result of overappraisal.

Absolute maximum loan limits apply only to loans made by the two associations for small owners (Nos. 7 and 8 in table 13) in that they are not allowed to lend on farms valued at more than 20,000 crowns in Jutland and more than 16,000 crowns in the Island Districts, which corresponds to loan limits of 12,000 and 9,600 crowns respectively. Before passage of the 1936 act, the percentage maximum loan limit for credit associations of small owners was 50 percent of the value of land and buildings and 40 percent if the property consisted of buildings without arable land.

There is no definite *minimum loan limit*, cost being the deciding factor in all associations. A minimum of 500 crowns is apparently possible in the associations of small owners because the Government defrays part of the administrative expenses currently.

Uniform *appraisal methods* for credit associations are not prescribed in the 1850 act which in a general way requires methods similar to those used in appraising real estate for the investment of trust funds of minors or other funds under public administration. Technical appraisal of a farm is entrusted to two professional appraisers appointed usually for several years either by the board of directors or by the control board of the association. During the appraisal the farm owner must be present. The association management is not obliged to accept the findings of the appraisers as binding. Its opinion on the managerial qualities of the farm owner or on the stability of farm real estate prices may greatly modify the ultimate loan sum.

The appraisal rules contained in the bylaws of the associations conform in all major respects with the principles laid down in 1869 by the Ministry of the Interior. These call for consideration of three criteria, namely, the appraiser's report describing the property (location, methods of production, livestock and inventory, quality of soils, durability and conditions of buildings, etc.), the sale value, and a value based on consideration of net returns. The act of 1850 says that the value to be considered in the first place is the sale value. However, in ascertaining this value account must also be taken of the income which reasonably may be expected from the property on the basis of past performance. Thus, even though a definite figure may not be established for the value based on capitalization of net returns, "on the whole the net return determines the sale value because the sale value must be such as to yield a suitable return on the purchaser's [or

creditor's] investment.[26]" More specifically, the net return taken into account should represent the "safe surplus" of income during a 10- or 12-year period. A multiplicator of 20 or in some associations of 25 is used for capitalization of the net return, so that the appraiser is freed from the necessity of estimating interest rates for capitalization.[27] As the current method of computing capitalized net return values considers only past returns and makes no assumption regarding future returns, it must be of necessity deficient during periods of unsettled economic conditions. For example, during the period from 1916–17 to 1925–26, net returns in Danish agriculture averaged 5.5 percent of the current sale value of farms and 7.7 percent of the so-called book value. Loans made in 1926–27, which would be based on a capitalized net return value during the preceding 10 years, represent too heavy a burden during periods like 1932–33 to 1936–37 when the corresponding net returns were 2.7 and 3.5 percent, or for the year 1931–32 when they were –0.4 and –0.5 percent. A committee studying the financing methods of credit associations suggested that the method used up to the present for computing the net return from farm property should be abolished and that the best expression for the net return is the amount of rent on the usual terms obtainable from the farm involved.[28]

Throughout the history of the associations appraisers as well as management have given more weight to current sale values than to capitalized net return values. But stress on sale price valuation resulted also in overappraisal. The constant rise of land values up to 1920–21, the expectation of further increases and pressure on the management to force loan sums upward induced the associations to be less cautious than they should have been viewing developments in retrospect. To some extent even the appraisers themselves appear to have been subject to such influence.[29]

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[26] (8, *p. 59.*)

[27] "This method of computing the net income and its practical adaptability is foreign to the majority of appraisers. For them the sale price is tantamount to the true value, and on this basis they are apt to conceive in advance a capitalized net return value which they substantiate by relating farm production and average prices" (*22, p. 76*).

[28] (*22, p. 77.*)

[29] Several quotations from Clausen (*8, pp. 61–64*) throw an interesting light on these possibilities: "It is of the greatest practical importance that the men doing the appraising occupy a position of independence. The appraisers are chosen by the board of directors or the control board, in some associations on the advice of the local representative, in other associations according to proposals received by local members. * * * Associations are found where appraisers are elected directly by members in a region. * * * In some cases they must be members of the association. In other associations membership is not a prerequisite, but members have preference. * * * Rules and regulations for appraisal are made by the control board which also has the right to suspend appraisers. * * * The correct thing would be that the government appoint appraisers, but that the control board reserve the right to develop schedules to be followed in making appraisals so as to make sure that it receives the information it considers necessary. It is hardly sufficient to grant all influence to the executives. They, as well as the members, may misuse it in providing for appraisals."

Association appraisals are considered sound by other mortgagees who supply the junior mortgages in addition to the first mortgage of the association. It is not surprising, therefore, that we find today such severe degrees of farm-mortgage indebtedness.

According to the sample studies made by the Danish Bureau of Agricultural Economics the current sale value of agricultural capital which had risen to 4,038 crowns per hectare in 1920–21 dropped gradually to 2,449 crowns in 1933–34. As land values have been rising again slightly from this low the Government is said to be anxious to prevent repetition of the situation just described. So far the Ministry of the Interior has not enforced more cautious valuation by issuing detailed rules nor is there any radical change in the technical methods of appraisal employed by the associations. Official publication by the Ministry of the Interior of data on the business of the associations and of committee reports thereon is deemed sufficient to influence association leaders to adopt more frugal appraisal policies. If need be, the publication of comparisons between tax authority appraisals, sale prices and appraisals made by associations is also contemplated.

Before 1914 the dangers of overappraisal were not clearly recognized as rising land values and a favorable agricultural situation enabled borrowers to carry their debts with apparent success. However, as early as 1860 one of the associations for urban real estate had to be liquidated because of losses incurred from excessive appraisals and commensurately excessive loans. In recent years the great uncertainty of the economic outlook has caused most of the associations to make new loans at not more than 45 percent of the value.

Preliminary requirements for obtaining a loan are the following: Accompanying every loan application made on a prescribed form to the control board are the title deed, surveyor's map of the site of the property, insurance policy covering buildings, stock, and inventory; an official statement from the registrar of mortgages with regard to encumbrance of the property, and one concerning tax payments; finally, a declaration with respect to income derived from the property, including terms of lease if on a tenant basis.

Every property is described in the official land register. There is also a mortgage register, under jurisdiction of the courts, in which each property has a special registration number. All mortgages are entered in this register so that title-searching, with its accompanying costly fees, is eliminated.

As a rule, association loans are made on *first-mortgage security*, but *second-mortgage loans* are possible, provided that the first trust is held by a Government agency, a public insurance institution, a savings bank or another credit association, and that both mortgages together do not exceed the established 60 percent maximum loan limit

for first-mortgage loans. In granting mortgage loans junior to loans by another association or to loans financed through another bond series of the same association, the borrower's joint liability which ordinarily is limited to two-thirds of the original principal is increased by one-tenth of that part of the new total debt which exceeds 33 percent of the appraised value of the property.[30]

The *basic or nominal interest rates* of association loans are the same as the rates of interest due on the bonds financing the loan. Interest rates on mortgage loans in general were given a ceiling of 6 percent by an act of March 27, 1912, which for new loans was lowered to 5 percent by an amendment in 1934. Like other lenders the credit associations are subject to this general rule.

An act of December 16, 1933, which established a maximum interest rate of 4 percent on new association farm loans and bonds was designed to be temporarily in force and to facilitate bond conversion at that time. With respect to interest rates on credit association mortgage loans and bonds, the act of April 7, 1936, in section 3, article 24, made the following provisions:

"The associations are entitled to demand of members a higher annual rate of interest than 4 percent on their loans and to issue bonds which have a higher rate of interest than 4 percent. Issue of bonds of a higher annual rate of interest than 5 percent and of bonds that are redeemed above face value or that yield a varying rate of interest can only take place with the consent of the Minister of the Interior, and he is authorized to stop the issue of such bonds at any time. The Minister of the Interior is furthermore authorized to stop the issue of 5-percent bonds if the rate is considered disproportionate to the current rate level."

The bonds of associations making farm loans were distributed as shown in table 14.

TABLE 14.—*Distribution of credit association bonds by coupon rates, 1937–38* [1]

Coupon rate of bonds	Bonds as a percentage of total volume outstanding
Percent	*Percent*
3	0.04
3.5	3.19
4	41.13
4.5	53.18
4.75 and 5	2.46
[2] 4.25	100.00

[1] Excluding associations making no farm loans.
[2] Weighted average.

Source: (*12, pp. 126–127*).

[30] For example, an association first-mortgage loan of 60,000 crowns on a farm valued at 100,000 crowns would involve a borrower liability of 40,000 crowns. If, on the other hand, the first-mortgage loan is 30,000 crowns with a liability of 20,000 crowns, and the borrower asks for a new loan of 30,000 crowns, the liability on the new loan is increased to 22,667 crowns (20,000 plus 2,667 crowns or one-tenth of the difference between 60,000 and 33,333 crowns). Total liability on the two loans is therefore 42,667 crowns instead of 40,000, which it would be if the entire 60,000 crowns had been borrowed as one first mortgage loan.

The average basic interest rate paid by association borrowers is 4.25 percent. Since 54 percent of these loans are on farms and since coupon rates of bonds issued on the security of city or rural real estate appear to be little or no different at all from those of bonds issued against farm real estate, it is safe to assume that 4.25 percent is also the average basic rate of interest paid by farmers in 1937–38.

The history of association bond issues and thereby of interest rates to the borrower shows that the associations have endeavored to reduce basic rates whenever the situation of the money market warranted such action.

Early bonds of the associations had coupon rates of 4 and 4.5 percent. In 1886 the Government converted its 4-percent issues into new issues of 3.5 percent, and in the following years quotations on 4.5-percent bonds, including those of the mutual credit associations, rose above par. In the years 1887–89 four of the associations then converted 4.5-percent bonds to 4 percent. In 1889 and 1895, when 4-percent bonds were at par, all associations converted their 4-percent issues into 3.5-percent bonds. Around that time new issues at 3 percent were also made. After 1900, however, interest rates had a tendency to increase, and the associations found it necessary to issue bonds at 4 percent for new loans, and in 1907 at 4.5 percent. At the end of 1912 most of the association bonds carried rates of 4.5 percent. In 1924 the first bonds at a coupon rate of 5 percent were issued.

With the object of lightening the burden of the mortgage debt on agricultural property, the Danish Government attempted in 1933 and 1934 to bring about a conversion of association bond issues having coupon rates from 4.5 to 5 percent into new issues at 4 percent. In these years approximately 80 percent of the farm loans made by associations carried the basic interest rates of 4.5 and 5 percent.

Following the enactment of a law of April 29, 1933, authorizing voluntary conversion of association bonds, various steps were taken to create money market conditions which would facilitate this operation.

First of all, interest rates on savings deposits were reduced by act of May 1, 1933, from 3.5 to 3 percent and those on bank deposits from 4 to 3.5 percent. By selling Treasury bills the Government obtained the means to set up in May 1933 a fund of 100 million crowns for buying 4-percent bonds. Also, the official bank discount rate was lowered first to 3 percent on June 1, 1933, and then to 2.5 percent in November 1933. Owing to these measures, quotations of the current 4-percent association bonds rose and in many instances hovered around 98, which made them a comparatively attractive investment.

Meanwhile, the National Bank of Denmark and other leading banks had begun to buy 4.5- to 5-percent agricultural mortgage bonds to the extent of approximately 400 million crowns or about one-fourth of the total volume of association bonds carrying these rates. At the request of the Government, the banks were to hold this portfolio until money market conditions became sufficiently favorable to conversion. Therefore, when on December 16, 1933, a law was passed which prohibited both the making of new association loans on agricultural property at rates higher than 4 percent and the issue of bonds bearing a coupon rate above 4 percent, the associations gradually redeemed the 4.5- to 5-percent bonds held by the banks (400 million crowns) and issued 4-percent bonds instead. They were enabled to carry out this voluntary conversion by the law of April 29, 1933, mentioned above.

As far as the farmer was concerned the voluntary conversion obviously involved saving in the payment of interest, but the mortgage debt of those borrowers whose bonds happened to be converted was increased. This fact may best be illustrated by an example: Danish credit associations do not make cash loans, but give the borrower bonds which he in turn must sell. Therefore, on a loan of 10,000 crowns for which credit association bonds at 4.5 percent interest had been issued and sold by the borrower at par, for example, the net proceeds of the loan were 10,000 crowns. If at the time of conversion new bonds covering the same loan and carrying 4 percent interest were quoted 2 points below par, the borrower would receive 200 crowns less. To make up the difference his principal was increased by 200 crowns, for the sale of 10,200 crowns worth of new 4-percent bonds at 98 netted 9,996 crowns so that the borrower would lose only 4 crowns by the transaction. While previously he had paid annually on the old loan 500 crowns or 5 percent (4.5 percent interest and 0.5 percent for amortization) he would pay on the new loan 459 crowns or 4.5 percent (4 percent interest and 0.5 percent for amortization), thereby saving 41 crowns a year.

However, the beginning made in voluntary conversion with the 4.5- to 5-percent agricultural mortgage bonds held by the National Bank and other banking institutions did not induce other bondholders to follow suit. Although 4-percent bond quotations rose steadily, in some cases—according to the financial strength of the association involved—even above par, the public assumed a waiting attitude in expectation of legislation on compulsory conversion which was very much discussed during 1934. So few bonds were offered for voluntary conversion that by the autumn of 1934 the scheme had practically collapsed.

Consequently, during the session of the Danish Parliament which was held toward the end of 1934, the Government recommended passage of a law for compulsory mass conversion of the 4.5- to 5-percent bonds still outstanding on agricultural as well as urban property but not including industrial property. The bill was rejected by the Upper House of Parliament. Another attempt to pave the way for general compulsory conversion of all 4.5- to 5-percent association bonds was made in the act of December 13, 1934, entitled "Act prohibiting the exportation of certain bonds." According to this act, conversion to 4 percent of the 4.5- to 5-percent bonds issued against urban and industrial property could also be carried out voluntarily. On January 22, 1935, representatives of the most important commercial banks and savings banks of Denmark met with the Prime Minister and other members of the Government to discuss ways and means of creating a fund large enough to buy up the 4-percent bonds issued in the place of 4.5- to 5-percent bonds, which would be redeemed at par. The Government declared that it would not guarantee the banks their subscriptions to the fund. The savings banks refused then to participate on the grounds that they were prevented by law from assuming the risk demanded of them, while the commercial banks claimed that the amount required for the transaction would be five times larger than their share capital. Owing to these difficulties and to the fact that economic conditions showed signs of gradual improvement, no further schemes to prepare the ground for compulsory conversion were developed.

On the whole, therefore, only slightly more than 400 million crowns' worth of credit association bonds secured by farm property, or approximately one-fourth of the total amount of 4.5- to 5-percent bonds outstanding, was actually converted.

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In the case of credit associations the coupon rate of the bonds or the basic rate of interest to the borrower does not represent the *effective rate of interest* because association loans are made not in cash but in bonds with a face value equaling the mortgage. The borrower has to sell these bonds on his own account in the open market. Such sales are rarely made at par. During the period from 1920 to 1934, for example, the most current 4.5-percent bonds of three credit associations had approximately the following price ranges: Mutual Credit Association for the Islands, 77 to 99; Land Credit Association of Jutland, 71 to 95; Mutual Credit Association of South Jutland, 61 to 94. Bond prices closer to par would materialize if coupon rates and thereby interest rates to the borrower were higher; in fact, quotations above par have materialized occasionally in connection with 5-percent issues. Nevertheless, borrowers prefer losing in bond sales to giving up the apparent advantage of a low rate of interest during the usually long life of the loans. In the case of the two associations making loans to small farmers (Nos. 7 and 8 in table 13) any losses arising to the borrower out of the change in bond quotations are assumed by the Government (500,000 crowns in 1937–38).

As the mortgagor pays interest on the cash actually obtained at a rate slightly or considerably above the nominal or coupon rate of the bonds, depending upon the size of the discount, the effective interest on a credit association loan is equivalent to the yield of association bonds.

TABLE 15.—*Average yield of selected credit association bonds,*[1] *1852 to 1937*

Decade	Individual year of decade									
	0	1	2	3	4	5	6	7	8	9
1850–59	-------	-------	4.4	4.2	4.4	4.2	4.2	4.5	4.8	4.7
1860–69	4.5	4.6	4.3	4.5	4.7	4.6	4.8	4.8	4.9	4.8
1870–79	4.9	4.7	4.5	4.4	4.4	4.6	4.9	5.0	5.0	4.7
1880–89	4.3	4.3	4.3	4.3	4.3	4.3	4.1	3.8	3.7	3.7
1890–99	3.9	4.0	4.0	4.0	3.7	3.6	3.6	3.7	3.8	4.3
1900–09	4.5	4.5	4.3	4.3	4.4	4.2	4.3	4.4	4.4	4.3
1910–19	4.4	4.3	4.4	4.6	4.6	5.0	4.8	4.9	5.0	5.2
1920–29	6.0	5.4	5.1	5.1	5.7	5.7	5.7	5.5	5.2	5.1
1930–39	4.9	5.4	6.0	4.9	4.4	4.9	5.1	5.2	-------	-------

[1] Bonds of the "open series" (not limited to specified total amounts) of the 2 oldest credit associations, e. g. Østifternes Kreditforening and Jydsk Landkreditforening.

Source: (*20, p. 128.*) The data shown were derived originally from Prof. Jørgen Pedersen's "Økonomi og Politik", 1930, Vol. 4, and supplemented in several instances by Dr. Carl Burraus' monthly calculations as published in "Obligationstidende."

Among the *additional charges* to the borrower the semiannual contribution to administrative expenditures and to the reserve fund are at times of considerable importance as an item increasing the effective interest rate. While the borrower's initial contribution to the mutual reserve fund (1.5 to 2 percent of principal either in full when the loan is closed or in four installments within the following 2 years)

is refunded, with interest, to the borrower after the loan has been repaid, only that part of the semiannual contribution which is not used for covering administrative expenses reverts to the borrower. In view of the long duration of loans, this contribution is not likely to be returned to many borrowers in one lump sum after the loan has been repaid. It has been explained above that whenever the reserve fund reaches a certain percentage of the bonds outstanding, the surplus is used for the reduction of principal outstanding on a prorate basis according to the borrower's share in the reserve fund. The semiannual contribution to administrative expenditures and the reserve fund is generally a fixed percentage of the original principal amounting to at least 0.1 percent per annum, that is, it remains the same amount during the life of the loan no matter how much of the principal has been repaid. That part of the contribution which goes to reserves may be reduced or cease entirely if the reserve fund has reached 5 percent of the amount of bonds outstanding, but the contribution to administrative expenses continues for the duration of the loan. Thus, members of the two associations mentioned in table 15 paid during the period 1852 to 1937 from 0.15 to 0.6 percent per annum to cover administrative expenses. In the case of the two associations specializing in credit to small farmers (Nos. 7 and 8 in table 13), the current contribution to administrative expenses and reserves is fixed at 0.2 percent. As this is not sufficient to cover administration of small loans, the government contributes annually to the administrative expenses of these two associations (31,000 crowns in 1937–38).

There are various other charges to the borrower which in the end increase the effective interest rate. In the example given below, it is assumed that a new loan of 100,000 crowns is being made on a farm insured at 250,000 crowns.

	Crowns
Appraisal fees [1] [2]	1, 048
Recording fee, 1 percent of principal plus 4 crowns [2]	1, 004
Stamp duty, 0.2 percent of principal	200
Commission to banker or broker for sale of bonds, 1 percent of principal	1, 000
Total	3, 252

[1] Credit association appraisers receive 8 crowns per appraisal of rural properties, the insured value of which does not exceed 12,000 crowns, and 10 crowns for properties of higher insurance value. In addition to this flat fee, they receive 0.2 percent of the insured value between 12,000 and 2,000,000 crowns. (For reappraisal 50 crowns are charged at the maximum.) Traveling expenses are 0.40 crowns per kilometer (nearly five-eighths of a mile). There is also a fee of 1 crown per every 10 to 15 acres of soil tested. In this example the farm is assumed to have 300 acres of soils to be tested. Appraisal by at least 2 appraisers is obligatory, each being paid separately by the borrower. Hence the components of the total appraisal fee: Flat fees—20 crowns; percentage fees (0.2 percent of 238,000 crowns or 476 crowns)—952 crowns; traveling expenses—36 crowns; soil test fees—40 crowns. The reviewing appraiser is paid by the credit association.

[2] In the case of the two associations making loans to small holders (Nos. 7 and 8 in table 13) the Government assumes the cost of appraisal and mortgages are recorded at reduced fees.

The total initial cost of the loan is therefore 3.25 percent of the nominal principal of 100,000 crowns. If the borrower decides to pay his compulsory initial contribution to the reserve fund of 1.5 percent in full when the loan is closed, and assuming that the basic interest rate is 4.5 percent and the annual contribution to administrative expenses 0.3 percent, total payments of the borrower during the first year of the loan would be 9.55 percent of the nominal principal. However, since the borrower has to sell at a discount the bonds in which the loan is made, the initial cost represents 3.42 percent of the amount realized, assuming the bonds are sold at 95. The initial cost also raises the effective interest rate inasmuch as it lowers the net proceeds of the loan. In the case under discussion the net on which the borrower pays 4,800 crowns during the first year (4.5 percent basic interest and 0.3 percent contribution to administrative expenditures on 100,000 crowns) is not 95,000 crowns but 91,748 crowns after deduction of the initial cost. Thus, the effective rate of interest during the first year is 5.23 percent instead of 5.05 percent.

The *repayment plans* of the credit associations are outlined by law in a general way. Amortization periods of the uncallable association loans may not exceed 60 years. Before passage of the 1936 act on credit associations, 45 years was the maximum in the case of the associations making loans to small farmers (Nos. 7 and 8 in table 13). The maturity most frequently occurring in practice is 46 years. Amortization payments must be such that during the last 5 years of the loan period not more than one-fourth of the original principal remains to be paid. Thereby repayment plans which would leave a major portion of the principal outstanding toward the end of the loan period will be avoided. Otherwise, the law gives the associations complete freedom in establishing amortization systems. In most cases repayment is by semiannual installments. Borrowers are permitted to repay in addition to the amortization quota any amount as advance installments provided that they give 6 months' notice and that 10 years have elapsed from the date on which the corresponding bond series or subseries was issued, because as a rule bonds are not callable by the associations for 10 years. Regular payments for amortization must be made in cash; advance payments may be made either in cash or in bonds of the corresponding series bought by the borrower in the open bond market. The last-mentioned alternative is supposed to enable borrowers to take advantage of favorably low bond prices. If, for example, the general level of interest rates in the open money market rises and bond prices fall accordingly, borrowers may make gains by paying advance installments on principal with bonds purchased at a lower price than that at which they were sold at the time when the loan was made. The

associations are allowed to influence the price of bonds by purchase or sale of their own bonds on the stock exchange.

The Danish credit associations have had the amortization repayment plan since their inception although the German Landschaften, after which they were patterned, did not introduce amortization until 1839 and even then made it optional for mortgage loans amounting to less than 50 percent of the appraised value. In 1896 a law authorized the credit associations to make straight-term loans as well as loans under a combination straight-term and amortization plan which would allow at the maximum 80 percent of the principal to remain standing until the end of the duration, the amortizable portion of the loan being subject to repayment within a maximum of 60 years. Loans being repaid under these plans are not to exceed 50 percent of the appraised value as against 60 percent in the case of amortization loans. However, this innovation has never gained major importance. In 1932, for instance, the volume of bonds secured by straight-term loans was 1.1 percent of the total volume of association bonds outstanding, that of bonds secured by partly amortizable loans, 13.4 percent. One association (Østifternes Kreditforening) did not issue separate bonds in connection with straight-term and partly amortizable loans but gave the borrower the same type of bonds for all loans. These bonds are known as "mixed" bonds. In 1936 the issue of bonds secured by either type of loan was prohibited for the time being.

In two of its bond series the Mutual Credit Association for the Islands (Østifternes Kreditforening) is trying out amortization during the first half of the duration at a higher rate than during the second half. It is believed that this plan will have the effect of eliminating the necessity of remortgaging or at least of postponing the date of remortgaging.

The Danish credit associations are known as rather inexorable creditors. Since the demand for farm property has exceeded the supply during the last 50 years, they have had little or no trouble in disposing of acquired farms, which are sold as soon as possible by public auction to the highest bidder. Therefore, liberal *extensions* for payment of arrears are not the rule. Managers for acquired farms are appointed only if sale proves difficult at the moment. According to regulations, an agricultural lending agency may not keep farm real estate for more than 3 years (formerly 2 years). *Trustee* or *receivership* management—such as practiced to some extent by the German Landschaften—which enables the mortgagor to reestablish himself on the farm without losing it, does not exist in Denmark so far as can be ascertained. *Foreclosure* is achieved quickly, as the associations have the privilege of ordering sale without recourse to the courts.

Loans are granted without specification of purpose. Consequently as long as payments are made promptly, there is *no control over the*

borrower regarding the ultimate use of funds after the loan is closed nor regarding his farm management, for instance, by current reporting of accountancy data. However, it is explicitly one of the loan conditions that representatives of the association may inspect the mortgaged property at any time. Before the end of May each year, the borrower, when and if called upon to do so, must give proof that his property is adequately insured against fire and that no arrears in payments of any kind encumber the farm. A system of regular borrower control is not required by the laws on credit associations.

Effectiveness of the Credit Association System

History and present importance of the credit associations lead to the conclusion that practical application of the principle of borrowing on collective security has supplied Danish agriculture with ample and easy credit. Had there been no credit associations, in all probability agriculture could not have achieved as speedily as it actually did the transformation of its structure from tenancy to land ownership and from grain to livestock economy.

From the viewpoint of organization, the credit associations have not been criticized to any noteworthy extent. The fact that the 1936 act made only minor changes in that respect while the principal features of the 1850 act were retained would also indicate that no important shortcomings of organization have been observed. Those who advocated enforcement of bondholder participation in the management of the associations were in the minority. The main argument of this group was that "the exclusive management of creditors' capital by debtors is an irrational form of management, particularly when the creditors are permitted to interfere only when the debtor regime has led to unfortunate results" and "that the public in granting an important concession of monopoly to the associations is vitally interested in the conduct of the associations." [31]

Mixed rural and urban lending, which is the case with five associations, subjects farm and city borrowers to identical loan conditions. Although the fundamental differences between city and farm real estate lending were pointed out frequently, proposals for strict separation have not been made and no disadvantage was seen in the lack of specialization. This is probably due to the fact that in the Danish national economy effects of the depression were being felt less in city than in farm real estate lending.

One organizational aspect which has received considerable attention is the question as to whether the associations should make joint bond issues rather than compete so to speak with each other in the

[31] (*22, p. 163.*)

money market by separate issues. As a large new issue by one association may have a depressing influence on the quotations of its bonds as compared with the prices of others, there is the danger that the demand for loans from this particular association decreases and that in order to avoid loss of business the management decides to raise the loan limits or to make higher appraisals. Joint issues would prevent such practices. A major advantage expected from joint issues through some sort of central institution is the adjustment of differences in the loan levels prevailing in city and farm mortgage lending. Loan levels in the latter field are considerably higher owing to the great demand for farm real estate. However, in this connection the bond-issue problem is of secondary importance. The loan level differences are brought about primarily by appraisal policies which, as has been seen above, are being controlled more specifically by the Government since 1936. In the opinion of the Government committee on credit associations, joint issues will improve the market for association bonds in foreign countries but not in Denmark, because investors consider the variety of association bonds a great advantage from the viewpoint of risk distribution and particularly like to purchase bonds secured by property in their home district.[32] Moreover, in order to attract foreign capital for investment in Danish agriculture, the associations do not necessarily have to introduce their own or special joint issues on foreign stock exchanges as the Mortgage Bank of the Kingdom of Denmark offers certain facilities in this respect.

While organizationally the credit associations appear to have fulfilled their task efficiently, on economic grounds criticism of their lending policies has been frequent. The ease with which credit can be obtained through them has apparently been an important factor in the growth of farm mortgage indebtedness. "Someone closely connected with Danish agriculture around the year 1900 said: 'Since 1850, when the first credit association was organized, the Danish Government has done everything in its power to increase the indebtedness of the Danish farmer and has been very successful in the attempt.' "[33] Giving borrowers the opportunity to acquire farm property through large loans and long amortization periods without substantial outlay of cash contributes to forcing land values upward and narrows the farmer's margin of economic safety. This is rather undesirable in a country such as Denmark where, owing to the pressure of population on the land, the demand for farms is always considerable. Thus, easy credit for farm purchases in particular deprived many farmers of the possibility of borrowing additional

[32] (*22, p. 35.*)
[33] (*28, p. 120.*)

operating capital within safe limits and increased agriculture's susceptibility to the effects of business cycle movements.

The Danish credit associations differ greatly from similar organizations and mortgage banks elsewhere in their policies regarding interest rates of bonds and mortgages. As a rule mortgage credit institutions when issuing a new series of bonds establish a coupon rate for the bonds and thereby a basic interest rate for the underlying mortgage loans which is more or less in harmony with the rate of interest prevailing at the time in the money market. The Danish credit associations, however, traditionally follow the policy of adopting coupon rates below the general level of interest rates, so that par value of the bonds is rarely insured. Losses from 10 to 20 percent suffered by borrowers when they sell their bonds are quite common. Nevertheless, this particular policy of the associations has not been changed for the reason that long-term borrowers prefer low nominal interest rates with losses on bond sales which ultimately result in effective interest rates perhaps considerably above the nominal rate to high nominal interest rates without noteworthy losses. Furthermore, from the viewpoint of the association, coupon rates of bonds and basic rates of interest on the mortgages sufficiently below the average level of money-market rates at the time of issue forestall to some extent bond conversions, that is, conversions are likely to become necessary less frequently than they would be called for by borrowers if the interest rate on their loans were always close to or in line with the level of the money-market rates prevailing at the time.

Yet, it appears that the association policy of lending at low nominal interest rates is not exceptionally advantageous to the borrower. In addition to the effective interest rates (bond yields) such as are given in table 15, current contributions must be made by borrowers to administrative expenses and reserves which in the case of lenders other than the associations ordinarily are included with the interest rate stipulated. Therefore, under the assumption that bond yields or effective interest rates charged the borrower express the average rate of interest prevailing in the money market the following statement has been made: "The generally accepted belief that the Danish farmer has obtained loans through credit associations at a greatly cheaper rate of interest than he would have had to pay to other lenders is not sustained by the table [15] above which shows the rates at which the borrower might have obtained loans elsewhere." [34] On the other hand,

[34] (*20, p. 129.*) The assumption that bond yields or effective interest rates of credit association loans are the same as the rates of interest at which the borrower might have obtained loans elsewhere is rather debatable. The rate of interest at which a credit association is able to borrow from investors does not necessarily coincide with the rates charged by other lenders. Since credit association bonds are a gilt-edged investment secured by the joint liability of many farmer-borrowers, it is conceivable for example that an investor prefers buying a certain volume of credit association bonds and receiving interest at a 4.5 percent

it is probably true that the availability of credit through associations has helped to keep interest rates on farm mortgage loans in general at a comparatively low level and that agriculture's interest burden would have been much higher if farmers had been obliged to borrow individually.

MUTUAL MORTGAGE ASSOCIATIONS (HYPOTEKFORENINGER)

Although rather unimportant from the viewpoint of total loan volume (1.1 percent of total farm mortgage debt), these associations merit some attention because they illustrate an attempt to make institutional credit on junior mortgage security available to agriculture under normal economic conditions and not, as in other countries, only within the scope of emergency financing schemes. In fact, no other country has real estate credit institutions corresponding to the mortgage associations.

Their lending activity is somewhat restricted in that a mortgage association loan cannot be made in case the first mortgage is held by a private individual or commercial bank. First mortgagees may be mutual credit associations, savings banks, insurance companies, and public institutions or funds. The need for mortgage credit facilities additional to those offered by the credit associations (Kreditforeninger) since 1850 was felt particularly in lending on urban real estate, where limitation to 60 percent of the appraised value was considered a handicap by many borrowers. In 1897, therefore, the Government was authorized to grant to mutual associations of borrowers intending to obtain credit on second mortgage security by bond issues priviliges of organization and operation similar to those enjoyed by the mutual credit associations.[35] Since then six mutual mortgage associations for urban real estate exclusively and three for real estate in rural districts (1906–7) have come into existence. With the exception of one urban association, they are still in operation. In 1937–1938 rural association loans outstanding accounted for 10.2 percent of the total for all eight associations. Not all loans made by the associations in rural districts are on farms.

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coupon rate or a 4.9 percent effective rate of interest to making a mortgage loan of the same size to an individual farmer at 5 or even 5.5 percent.

Nevertheless, the contention made in (*20*) to the effect that Danish farmers have not obtained credit association loans at rates greatly cheaper than those charged by other lenders appears to be substantiated by the following comparisons: In 1932, when rates of interest charged by the National Bank of Denmark on loans in general ranged from 4 to 6 percent and those on loans from the principal commercial banks from 4 to 7 percent, the effective rate to certain association mortgagors (table 15) was 6 percent; likewise, in 1933 when the National Bank rates had been lowered considerably and were from 3 to 4 percent, while those of commercial banks were from 3 to 5.5, the effective rate to certain association mortgagors was 4.9 percent, not including the contribution to administrative expenses. (For data on the bank rates quoted see (*12, p. 119*).)

[35] The first institution of this kind was started in 1895 as a stock company and was made a mutual mortgage association by law of December 15, 1897.

TABLE 16.—*Rural mortgage association loans outstanding, Mar. 31, 1935*

Name of mortgage association	On farms	On other real estate	Total	Farm loans as a percentage of total loans
	Million crowns	*Million crowns*	*Million crowns*	*Percent*
Jydsk Landhypotekforening	27.0	5.5	32.5	83.1
Østifternes Landhypotekforening	10.5	5.3	15.8	66.5
Husmandshypotekforeningen	5.0	.5	5.5	90.9
Total	42.5	11.3	53.8	79.0

Source: (*21, p. 41.*)

The organizational structure of the mortgage associations is patterned largely after that of the credit associations. Although only borrowers become members, as a rule both borrower and bondholder have voting privileges in regard to association management. Owing to the greater risk connected with junior mortgage loans up to 75 percent of the appraised value, the guaranty for mortgage association bonds had to be increased over that prescribed for the credit associations. Thus, mortgage-association borrowers are jointly and severally liable for all bond issues to the extent of the full current value of their property plus any other assets in their possession. Also, reserve fund contributions of the borrowers usually are larger than in the credit associations, and range from 3 to 5 percent. In addition, mortgage associations are required to have a capital subscribed by "guarantors," that is, persons interested in the establishment of the association and not necessarily borrowers. Earnings must be applied to the payment of dividends on this capital up to a maximum of 14 percent. It is obvious that the mortgage associations depart from the the cooperative nonprofit principle which rules the business of credit associations. The mortgage-association committee of the Ministry of the Interior commented on the dividend issue as follows: "This feature is a result of the fact that the guarantors of the mortgage associations are in a position to influence the board of directors. It does not fit into the structure of associations based on mutual liability, especially if the influence of the guarantors on the board of directors is very strong. In the opinion of this commission, dividends of from 10 to 12 percent [actually paid] over a number of years are somewhat excessive even in view of the risk involved." [36]

Bonds issued by the mortgage associations must state clearly that the underlying loans are secured by second mortgages; like credit-association bonds they may be registered or made out to the bearer and may be transferred without paying stamp and capital transfer taxes. Despite the seemingly far-reaching security requirements,

[36] (*21, pp. 43–44 and 46.*)

mortgage-association bonds are not admitted as legal investments for trust funds as are those of the credit associations, and interest rates of mortgage-association loans exceed those of the credit associations by 0.5 to 1 percent. The prescribed maximum amortization period of loans is 40 years, that is, 20 years less than for credit-association loans. In actual practice mortgage-association farm loans are amortized over 36 to 38 years.

The record of the mutual mortgage associations leads to the conclusion that in Denmark at least the provision of farm mortgage credit on junior security through societies formed for the purpose is not a workable solution. As early as 1911, at a time when the agricultural situation was favorable and when there were indications of constantly rising prices of farm property, a Government commission on agriculture warned that the financial status of the mortgage associations would be endangered in depressed periods and proposed changing them into associations specializing in rapidly amortizable land-improvement and production credit, instead of allowing them to make long-term loans for settling purchase money balances or any coheir claims. The availability of junior mortgage credit for durations longer than private lenders are likely to grant may induce prospective farm owners to purchase properties too large in proportion to the operating capital at their disposal. Furthermore, stimulation of the demand for farms and of land values is, of course, enhanced by the availability of second mortgage loans. As the number of mortgage association borrowers is not large—around 18,000 out of 204,100 farms—these two factors are not likely to have played an important role as far as agriculture as a whole is concerned, but were undoubtedly at work in the case of farms on which mortgage association loans were made. The debt burden of such farms is relatively heavier than on other farms, not only because of the size of the debt contracted on perhaps excessively high-priced farm property, but also because of the carrying charges.

Mortgage association loans appear to be more expensive than ordinary bank loans. For example, it has been demonstrated[37] that during the period from 1924 to 1933, when 5-percent bonds of the Østifternes Landhypotekforening averaged 80 percent of par, the effective interest rate to the borrower was 7.6 percent per annum, or 8.1 percent assuming that regular annual contributions to the reserve fund were used for covering losses. Ordinary bank credit, presumably against second mortgage security, was available during the same period at 6.75 percent per annum (interest, commissions and other costs included). For members of this association who borrowed during the year 1932, the interest burden was higher still as the bonds in question were quoted from 58.5 to 72.25 percent of par

[37] P. A. Callø in (*21, pp. 32–33*).

and the corresponding yields or effective interest rates were 10.1 and 7.6 percent. Interest on cash advances from banks averaged 6.4 percent during 1932. In all this, bankers' commissions on the sale of bonds and the annual contributions to administrative expenses were not included, and it is assumed that borrower-members were not required to make any extraordinary payments to meet mutual liability. It is not surprising, therefore, that the farm mortgage associations had a sad loan experience when returns from farming declined from the favorable levels prevailing until 1924–25, on whose continuation expectations for the future solidity of the mortgage associations were apparently based. During the period from 1925–26 to 1927–28 when net returns from farming were below 2 percent, losses of the farm mortgage associations began to grow. With minor variations, they showed a trend toward increase and as a result of the depression were particularly heavy in the years 1932–33 and 1933–34. Although net returns increased substantially from the —0.5 percent level of 1931–32, mortgage losses continued to be rather heavy.[38] From 1924–25 to 1934–35 the three rural mortgage associations lost 16.5 million crowns on loans made, which may be compared with total loans outstanding of 63 million crowns in 1924–25 and 50.1 million in 1937–38.

Most seriously affected was the largest rural mortgage association, i. e., that of Jutland (Jydsk Landhypotekforening), allegedly not only as a result of depression effects on its borrowers, but also owing to faulty loan policies and methods in receiving and disposing of foreclosed farms. Its losses began in 1926–27 and amounted to 15.3 million crowns by 1937–38. Servicing of the bonds was stopped in 1931. Bankruptcy was avoided only because the association was placed under administration of the Department of the Interior and by special act of Parliament was enabled to force bondholders in 1934 to accept a reduction of 20 percent of the face value of the bonds in certain series. It is significant that the basic principle of mutual liability of borrowers was not enforced in this connection, although the collective assets of the borrowers would have more than covered the losses. The social and economic consequences of liquidating borrowers' assets to compensate bondholders would have been too grave, and, therefore, losses were considered too large to be recovered from borrowers alone. In addition to the reduction in the face value of the bonds, holders also suffered losses through waived interest payments. In the case of this association, the mutual liability of borrowers has proved to be a dubious guaranty for the security of bonds.

The Mortgage Association of Owners of Small Farms (Husmandshypotekforeningen) discontinued servicing its bonds in 1935 and

[38] For details see (*21, table p. 42*); for comparative net return figures, see table 2 of this report.

was authorized to credit amortization payments to the reserve for losses instead of employing them for reduction of the borrower's debt. Mutual liability was also invoked in the case of the mortgage association for the Island Districts (Østifternes Landhypotekforening) which continued to service its bonds, but used parts of the borrower's semiannual installments for loss coverage. Members resigning from the association by paying their debt in full were obliged to pay 3.8 percent of the original principal into the reserve fund over and above the initial contribution made at the time their loans were closed and also lost the interest accrued over a period of years on the initial contribution.

Strictly urban mortgage associations did not get into similar difficulties. Three of them had no losses at all despite the depression; two had only minor losses, while one was more seriously involved. During the 11 years from 1924–25 to 1934–35, their accumulated losses amounted to only 1,189,000 crowns. The combined losses of urban and rural mortgage associations were 17.7 million crowns, of which 93.2 percent is attributable to the rural associations and 6.8 percent to urban associations. It is interesting to note that the rural association least affected by the depression, namely that for the Island Districts, has the lowest percentage of loans on farms.

As the demand for most types of urban housing did not relent in Denmark during the depression, returns from city real estate were not greatly impaired. Consequently, there is no objection to second-mortgage credit associations in the cities, while it is believed by many experts interested in the problem that the rural second-mortgage associations should be liquidated or changed to production credit associations which would make loans to the individual borrower not in large lump sums and for long durations but in installments as need arises and, of course, for short periods. Negotiations between the Ministry of the Interior and the associations to put the last-mentioned proposal into practice on a voluntary basis were unsuccessful. The committees studying the problem have not recommended a compulsory change. They proposed various modifications in the basic set-up of the associations aiming to make their position less vulnerable in depressed periods without, however, definitely solving the problem. Briefly, the recommendations cut the maximum loan limit to 10 percent of the appraised values, the amortization period to 30 years, and the dividends to guarantors to 6 percent per annum, surplus profits to be accumulated in a special reserve fund from which extra dividends and "bonuses" to borrowers would be paid from time to time. Mutual liability was proposed to cover only the loans of a determined bond series as is actually the case with the mutual credit associations. An act of April 7, 1936, establishing new regulations for mortgage associations applies to urban associations only, which may be taken as an

indication that the Government does not intend to encourage rural mortgage associations in the future. In fact, they are generally considered to be the weak spot of the agricultural credit system.

SAVINGS BANKS

The Danish savings banks are older than the credit associations. Some of them were founded around 1810, but their major development took place after 1870. In 1880 the Savings Bank Act was passed which gave these institutions a more definite status and placed them under Government supervision. Otherwise, there has been no special legislation on their behalf which, as in the case of the credit associations, would fix in a detailed fashion particulars regarding organization, management, and lending policies. Any group of people may start a savings bank. No liability of the members is involved, except the limited liability for shareholders in the banks organized as stock corporations or for the suppliers of guaranty capital under other forms of organization. As savings banks do not necessarily have to possess a share or paid-in guaranty capital, this item is comparatively small on the whole. In 1937–38 paid-in capital totaled 3.0 million crowns compared with total loans of 1.8 billion and total deposits of 2.2 billion crowns.

Profits made from the investment of the deposits are not distributed to depositors until the reserve fund has reached at least 5 percent of the deposits. In 1937–38 reserve funds of the savings banks amounted to 11.3 percent; in 1936–37, to 10.3 percent. Distribution of profits is accomplished through changes in the interest rates of savings deposits. In those savings banks that are organized as stock or share corporations, profits must revert in such fashion to all depositors and not only as dividends to the shareholders or founders (guarantors). Profits not accumulated in the reserve fund nor paid out in interest on deposits are spent in public welfare work (charities, subsidization of educational and social programs, etc.) in return for the privilege of tax exemption which the savings banks enjoy.

The status of the savings banks is characterized somewhat paradoxically by saying that they are "private institutions of a public character for the public welfare." [39]

The members or depositors elect the directors but have no permanent representatives of their own on the board. In some cases, the directorate is a self-perpetuating body. In the early history of the savings banks, the directors did not receive any compensation for their work, and even today in the small banks their services are almost gratuitous or entirely so.

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[39] (*2, p. 553.*)

Most of the savings banks are located in rural communities and their loans are predominantly on farm real estate. As may be seen from table 16, the total volume of farm mortgage loans of the smaller number of banks located in cities is not only larger than that of their loans on urban property but also larger than that of the farm loans made by banks in rural communities.

TABLE 16.—*Mortgage loans by savings banks, 1937–38*

Location of banks	Number of savings banks	Loans on farm real estate as a percentage of total mortgage loans	Loans on nonfarm real estate as a percentage of total mortgage loans	Total mortgage loans
		Percent	*Percent*	*Thousand crowns*
Copenhagen	5	52. 8	47. 2	220, 797
Other cities	103	60. 2	39. 8	910, 218
Rural communities	[1] 416	95. 2	4. 8	186, 623
Total	524	64. 0	36. 0	1, 317, 638

[1] Of this number, 161 banks had deposits of less than 250,000 crowns, 180 banks from 250,000 to 1,000,000 crowns, 68 banks between 1 and 5 million crowns, and 7 banks had deposits of 5 million crowns or more.

Source: (*12, pp. 124–125*).

Total savings bank mortgage loans on farms outstanding in 1937–38 (842,650,000 crowns) account for 21.0 percent of the total farm mortgage loans of 1937 [40] and for 64.0 percent of the total amount of all savings bank loans in 1937–38. Besides lending on farm and city real estate, the savings banks make loans to municipalities, to individuals on various kinds of security, and personal loans as well. Indirectly, the savings banks lend to agriculture by investing funds in credit association bonds. In 1932, 8.6 percent of the credit association bonds in circulation were held by savings banks.

Farm mortgage loans are made to members of the savings banks (depositors) preferably against first mortgage security up to 60 percent of the appraised value. However, the maximum loan limit most frequently adopted is 50 percent. Second mortgage security is accepted only if the 60-percent loan limit is not thereby exceeded. Duration appears to be as a rule 20 years, which is also the maximum. No loans are made for less than 10 years. Interest rates are most commonly 4.5 percent on first and 5 percent on second mortgage loans, although in some cases the higher rate is charged on first mortgage loans. In 1937–38 the amount of interest collected by savings banks amounted to 4.51 percent of the loans outstanding.[41] There are no additional charges to the borrower for administrative expenses or reserves such as are imposed by the credit associations;

[40] Total farm mortgage loans in 1937 amounted to 4.017 billion crowns as shown in table 5. In table 12, the percentage in question is given as 18 percent for 1937.

[41] (*12, p. 130.*)

furthermore, as loans are made in cash borrowers do not lose on bond transactions; finally, owing to the intimate personal knowledge officers of the savings banks have of the borrower's assets, particularly in the small rural banks, appraisal expenses, if any, are likely to be small. The total cost of savings bank loans is, therefore, such that the effective interest rate on a 20-year loan differs very little from the nominal interest rate charged. In view of this fact, the question might be raised as to why the savings banks are not the primary source of mortgage credit to the farmer. One of the reasons probably is that farmers prefer the considerably longer durations offered by the credit associations and do not mind paying a premium for the privilege; another is that in savings banks the loanable funds for mortgage loans must be restricted to that portion of their deposits which with due regard for the need of meeting withdrawal demands may be invested in long-term loans.

In 1937–38 total deposits in the savings banks amounted to 2.2 billion crowns, of which 60.2 percent were invested in urban and rural mortgage loans. In addition, 12.5 percent of the deposits were in loans to municipalities, most probably for long terms. It seems that with 72.7 percent of the deposits in long-term loans, the Danish savings banks have gone as far as possible. German savings banks, for example, are not permitted to invest more than 50 percent of their total deposits in mortgage or long-term loans.

Savings banks appear to use three repayment plans: Payment in full at maturity date; scheduled payments on principal during term of mortgage which still leave a substantial portion of the principal to be paid at final maturity date; and complete amortization spread over the entire period of duration. Semiannual payments of interest and principal are the rule. The portions of the total mortgage loan volume subject to each of the three repayment plans are not known.

OTHER PRIVATE MORTGAGE CREDITORS

There are a number of minor institutional sources of first mortgage credit on farms, such as the National Trust Institute (Overformynderiet) and other foundations, for which loan-condition data have not been obtained. It is known, however, that most of them make straight-term loans only. Their interest rates are probably not different from those charged by other lenders. The National Trust Institute is also an indirect source of capital to agriculture as it buys substantial quantities of credit-association bonds (urban and farm real estate), representing in 1932, for example, 7.2 percent of the total volume of credit-association bonds in circulation, that is, almost as much as was held by the savings banks.

The loan conditions of insurance companies, commercial banks, and private individuals are summarized in table 17. As far as *insurance companies* are concerned, it may be said that their share in the mortgage indebtedness of Danish agriculture is so small, e. g., 0.5 percent, because they prefer to lend to farmers indirectly by investing funds in credit-association bonds. In 1932 they held 10.8 percent of the total volume of credit-association bonds outstanding, including, of course, bonds of associations making loans on urban real estate. Farm-mortgage loans from insurance companies are strictly against first-mortgage security. *Commercial banks*, on the other hand, are not reluctant to accept second-mortgage security. Conditions of loans made by *private individuals* depend upon the degree of personal relationship between borrower and lender. Much of the indebtedness to private individuals arises out of inheritance claims which usually are left standing as interest-bearing mortgages ranking after other credit, in all probability third or fourth. This is also likely to be the rank of many cash loans from private individuals. Owing to the fact that appraisals, even by credit associations, have been too optimistic in the past, it is safe to assume that today private mortgage loans are to a large extent situated in the realm of claims above the recovery value of the farm. Nevertheless, interest rates are not as high as would be expected in view of the risk involved, because coheirs who keep their share in the farm, as well as relatives or friends making cash loans, take for a standard the comparatively low nominal rates charged by credit associations.

TABLE 17.—*Farm mortgage loan conditions stipulated by insurance companies, commercial banks, and private individuals*

Description of condition and lenders	Maximum		Minimum		Most frequent	
Loan limit as a percentage of the appraised value:						
Insurance companies	60		---		50	
Commercial banks	75		---		60	
Private individuals	---		---		Over 75	
Duration in years:						
Insurance companies	10		5		10	
Commercial banks	20		5		10	
Private individuals	40		10		20	
	First mortgages	Junior mortgages	First mortgages	Junior mortgages	First mortgages	Junior mortgages
Interest rate (percent per annum):						
Insurance companies	5	---	4.5	---	4.5	---
Commercial banks	5	5	4.5	5	5	5
Private individuals	4.5	5	0	0	4.5	5

Source: As reported by Erland Gjessing, American Vice Consul, Copenhagen, in (*16*).

Most of the loans from these three sources are repayable in full at the end of the duration period stipulated. Insurance companies and commercial banks, however, sometimes ask for specific partial pay-

ments on principal without following a regular amortization plan. In such cases, a substantial portion of the principal remains to be paid at the final maturity date.

In 1937–38 the amount of interest collected by commercial banks was 5.5 percent of farm mortgage loans outstanding.[42] Commercial banks apparently charge rates slightly above the 5-percent maximum reported in table 17 which is also the legal maximum rate of interest on mortgage loans (act of March 27, 1912, as amended in 1934). In explanation of this discrepancy it may be said that it is possible for mortgagor and creditor to agree on evading the legally established maximum rate of interest by taking advantage of certain legal technicalities in drawing up mortgage deeds.

The amount of interest collected in 1937–38 on farm mortgage loans by other lenders, the majority of whom are believed to be private individuals, was 4.6 percent of total loans outstanding.

GOVERNMENT SOURCES OF MORTGAGE CREDIT

Mortgage Bank of the Kingdom of Denmark

The Mortgage Bank of the Kingdom of Denmark (Kongeriget Danmarks Hypotekbank) was founded in 1906 with a Government capital of 20 million crowns calling for dividends of 3 percent per annum. The Government appoints the three executive directors of the bank and one member of the control board of five, four others being elected by Parliament which also elects the bank's two auditors. Despite Government ownership and control, the bank may not be considered as an official lending institution because it does not use any Government funds for making mortgage loans to farmers directly. It was conceived rather as an auxiliary agency for credit associations and for financing certain types of real-estate mortgage loans made and guaranteed by the Government. As was mentioned previously, the bank buys credit association bonds and Government bonds issued in connection with the land settlement programs. On the basis of this security it issues it own bonds for sale in Denmark and, as far as feasible, in foreign countries.[43] It performs the same service with respect to Government bonds issued for financing a housing and construction program, as well as bond

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[42] (*12, p. 130.*)

[43] In financing the purchase of small holdings, the Government supplies as a rule nine-tenths of the appraised value of the real estate, while one-tenth has to be paid by the settler. If the value is 10,000 crowns, for example, the 9,000 crowns are split up into a first mortgage of 5,000 crowns and a second mortgage of 4,000 crowns. While the Government holds the second mortgage, it sells the bonds covering the first mortgage to the Mortgage Bank which, on the basis of this security, sells an equivalent amount of its own bonds.

issues made by municipalities and the Danish Tithe Bank (Kongeriget Danmarks Tiendebank).[44]

During the period from 1906 to 1937, the Mortgage Bank bought 195.4 million crowns worth of such bonds, of which credit association bonds (urban and rural) constituted 33.7 percent, land settlement bonds 39.5 percent, municipal bonds 14.6 percent, Tithe Bank bonds 0.9 percent, and housing and construction bonds 11.3 percent. Although on the whole purchases by the bank concern less than 1 percent of the total volume of bonds in circulation now, they have at times been instrumental in improving bond prices. The total volume of Mortage Bank bonds outstanding may be eight times its capital. In addition to being secured by the underlying bonds purchased, Mortgage Bank bonds are guaranteed by the Government. The coupon rates of the 11 bond issues made range from 3 to 5.5 percent. Five of the issues were made in Danish crowns only, two in crowns and pound sterling, one in Swedish crowns, pound sterling and Dutch guilders, one in United States dollars, one in Swedish crowns and pound sterling, and one in pound sterling.

Land Settlement Loans

Since 1899 the Danish Government has been making appropriations for land settlement, that is, for establishing small holdings large enough to keep the owner fully occupied in farm work. From 1919 on, the Land Purchase Fund, acquired through seizure of parts of entailed estates and administered by the State Land Control Committee (Statens Jordlovsudvalg), has been used for the same purpose. In other words, two distinct schemes were in operation side by side possibly in order to determine which would be more effective. About 21,000 small holdings have been established under the various acts with the help of Government loans totaling 192 million crowns, of which less than one-third has been repaid by borrowers.[45] Some of the land settlement acts passed since 1924 carried provisions for outright Government subsidies, which were abolished later. All acts dealing with land settlement were consolidated in the basic act of May 14, 1934, whose main provisions concerning farms and small holdings subject loans to cover the cost of building and the purchase of land, or the cost of building alone, to an interest rate of 4 percent per annum

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[44] By an act of 1903, the annual payments of tithes to the crown, church, and landowners (dating from feudal times) were abolished and capitalized within certain limits. The payees were compensated by advances of the capitalized amount from the Tithe Bank, which thus acquired a real-estate mortgage on the property of the debtor. As far as can be ascertained, payments on some of these mortgages are still being made. The affairs of the Tithe Bank are handled by the Mortgage Bank of the Kingdom of Denmark.

[45] Space restrictions do not permit a detailed discussion of the many interesting economic and social aspects of Danish land settlement and of the many changes that have taken place since 1899 in the methods of financing. It is suggested, therefore, that the reader consult in this connection (*18, pp. 122–132*), (*15*), (*27, pp. 55–67*), (*25, pp. 26–29*), and (*23*).

during the life of the loan and to amortization at the rate of 0.5 percent after a grace period of 5 years. Such loans are made up to nine-tenths of the cost involved, the settler assuming the other tenth; but there are various absolute maximum loan limits for land purchase as well as building loans depending upon the type of settlement (small holding, small farm, truck farm, etc.).

A particularly interesting feature of land settlement loans was that borrowers could choose to pay interest not at the fixed rates stated above but on a *sliding scale of interest rates* varying with the price of barley, butter, and bacon. The acts of March 25, 1933, and May 14, 1934, regarding the establishment of small holdings opened up this new possibility. To be sure, the small farms created under the first set of land settlement acts [46] which paid interest at the rate of 3 percent and had paid off by 1933–34 a more or less substantial part of their debt were not greatly interested in the new method, but the farmers who were obliged to pay 4 and 4.5 percent under later acts [47] saw some advantage in it, for about half of the total number of 21,000 holdings created under the various acts adopted the sliding scale of interest payments. Amortization payments continued at 0.5 percent of the principal received. For various reasons given below, the plan was abandoned after a few years of operation.

The procedure of determining the amount to be paid was the following: The sum payable for interest at the fixed rate was converted into quantities of butter, bacon, and barley on the basis of the average prices of these products prevailing during the period 1926–30, the quantity equivalent arrived at for each of the three commodities accounting for one-third of the cash payment for interest at the fixed rate. These quantities were then related to the annual average prices of the products in question as quoted by the Copenhagen Commodities Exchange for butter as well as barley and by the cooperative bacon factories on bacon from first grade hogs. Thus, for example, 600 crowns of interest represented 66.03 kilograms of butter, 135.14 kilograms of bacon, and 13.36 quintals (100 kilograms) of barley. On the basis of average annual prices prevailing during the years specified, the borrower paid instead of 600 crowns only 511.61 crowns in 1935 and 554.26 crowns in 1936.

The act of May 14, 1934, contained the provision that payment of interest at fixed rates would have to be resumed if the amount payable at sliding scale rates dropped below 50 percent or exceeded by a like amount the sum payable at the fixed rates. As long as farmers could save on their interest payments the sliding scale method was accepted. However, in 1937 prices had risen so that 623.91 crowns had to be paid under the sliding scale method as against 600 crowns at the fixed rate. Although the increase did not represent 50 percent of the amount payable at the fixed rate and despite the savings previously made in interest payments, discontinuation of the sliding scale method was advocated, because a number of other valid reasons entered the picture. Small holdings tend to specialize in hog raising but do not have enough land for growing sufficient quantities of feed grains. As the 1936 grain harvest

[46] 1899, 1904, 1909, 1914, 1917.

[47] 1919, 1920, 1921, 1922, 1924, 1927, 1930, 1933, 1934.

was rather poor, additional quantities of feed grains, including barley, had to be bought at very high prices, which not only increased operating expenses but also that part of the interest which was payable on the barley basis. Moreover, the reduction of bacon exports following British import restrictions unfavorably affected the income of small holders.

The substitute plan worked out subsequently crystallized in the act of April 13, 1938, which provided for *interest payments according to net returns*, that is, the rate of interest originally fixed under the land settlement act involved was to be lowered or increased according to the fall or rise in net returns. Again farmers were free to choose between payment at fixed rates of interest and the new method. About three-fourths of the small holders who received loans under the land settlement scheme favored the new method, no doubt in anticipation of savings in the payment of interest. In the summer of 1938, it was generally believed that such savings would not materialize, at least not in the current year, and that in all probability the provisions of the act would have to be changed. So far, however, no information to this effect has been received. Table 18 was worked out in connection with the 1938 plan.

TABLE 18.—*Reduction or increase of interest rates payable on land settlement loans*[1] *according to net returns from farming*

Net returns from farming as a percentage of agricultural capital[2]	Corresponding increase (+) or decrease (−)	
	In interest rate[3]	In absolute amount of interest at the rate of 4.5 percent
	Percent	*Percent*
2.5 percent and less	−2.5	−55.5
More than 2.5 up to and including 3.0	−2.0	−44.4
More than 3.0 up to and including 3.5	−1.5	−33.3
More than 3.5 up to and including 4.0	−1.0	−22.2
From 5.0 to below 5.5	+0.5	+11.1
From 5.5 to below 6.0	+1.0	+22.2
From 6.0 to below 6.5	+1.5	+33.3
6.5 or more	+2.0	+44.4

[1] Rates of interest originally fixed under the various land settlement acts: 3, 4, and 4.5 percent.
[2] As calculated by the Danish Bureau of Agricultural Economics and expressed as a percentage of the "book value" of agricultural capital on farms having a real-estate value not exceeding 10,000 crowns; for differences between book value and commercial value, see table 2.
[3] Expressed in percentage parts of the rate itself and not in percentage increase or decrease; for example, if the rate originally stipulated for the loan is 4.5, a 1-percent reduction means a new interest rate of 3.5 percent.

Source: Art. 3 of act of Apr. 13, 1938, as reported by Erland Gjessing, American Vice Consul, Copenhagen

If interest payments based on net returns work out to be 50 percent below or above the amount of interest due at the rate originally fixed under the land settlement act involved, the 1938 act will not be effective and payment at the originally stipulated rate will take place. This is also the case if net returns are between 4 and 5 percent. It will be noted that no provision for increase or decrease is made in table 18 as far as this particular range of net returns is concerned.

Figures taken from the report of a committee considering the bill that became the act of April 13, 1938, illustrate the differences in the rate of interest which application of the act would have had in years preceding 1938.

TABLE 19.—*Interest rates of land settlement loans under different plans of rate determination, 1933–34 to 1936–37*

Crop year (July to June)	Interest rates resulting from application of—		
	Fixed rate [1]	Sliding scale plans based on—	
		Prices of 3 farm products [2]	Net returns
	Percent	*Percent*	*Percent*
1933–34	4.25	2.80	2.75
1934–35	4.25	3.25	3.25
1935–36	4.25	3.25	3.25
1936–37	4.25	3.63	[3] 1.75

[1] Apparently an assumed average rate, for since 1919 some of the loans were made at 4.5 percent, others at 4 percent.
[2] Butter, bacon, barley according to acts of Mar. 15, 1933, and May 14, 1934.
[3] This figure is fictitious as according to the law of Apr. 13, 1938, the amount of interest payable must not fall by more than 50 percent below the amount payable at the rate originally stipulated. The lowest rate possible would, therefore, be 2.125 percent.

Source: Erland Gjessing, American Vice Consul, Copenhagen.

In connection with the land-settlement program, advances are made from the National Loan Fund (Stats-Laanefonden) to *private associations* formed for the purpose of buying collectively large holdings of land or estates for subdivision into small farms (Foreninger for Udstykning af større Landejendomme). Around the beginning of the twentieth century, numerous private associations of this kind were formed under Government auspices and also enjoyed from 1906 on financial support from the State. Owing to the rise in land values during and after the 1914–18 war, their activities practically ceased. It is interesting to note that during this period there was a trend in the opposite direction, small farms being bought and combined into larger operating units until legislation passed in 1918 stopped this development.

Similar associations were authorized again by an act of April 1, 1925. At a price approved by the Minister of Finance, they must buy a minimum area of 40 hectares (98.8 acres) to be eligible for Government loans, and they must also have a capital of at least 35,000 crowns either in cash or already invested in land. Bylaws to be approved by the Minister of Finance and the Minister of Agriculture must provide that the capital invested by members of the association may pay dividends not exceeding 5 percent, and that neither members nor directors are to receive remuneration for their services to the association. Existing farms can be subdivided only under the condition that a nucleus is left

amounting to at least 7 hectares (17.3 acres) of good land or 14 hectares (34.6 acres) of poor land, such areas being deemed sufficient to support a farm family. If all these conditions are fulfilled, the National Loan Fund advances sums equal to the capital of the association up to a maximum of 100,000 crowns. Liability for the obligations of the association toward the National Loan Fund is restricted to the members of the board of directors who may be sued jointly and severally.

The Government loan is to be secured by a real-estate mortgage and also by livestock and equipment, provided these items are purchased. The mortgage in question may be junior only to mortgages in favor of credit associations and trust funds for minors. If the land purchased is devoid of buildings, the Government may insist on first mortgage security. In this case, the loan must not exceed nine-tenths of the value of the land. The Government charged 5.5 percent—since 1934, 4 percent—interest on its advances which are repayable after 3 years of grace in equal installments during the following 10 years. However, to promote the creation of small and medium-sized farms, more favorable repayment terms were established for loans on newly created farms having a real estate value (land and buildings) not exceeding 22,000 crowns. After a new farm was sold by the association, the National Loan Fund was authorized to make a mortgage loan on it against junior mortgage security up to 20 percent of the value, provided that the first mortgage was held by a credit association or a trust fund. Thus, the buyer of a new farm was enabled to obtain possibly 80 percent of the purchase price in the form of loans from credit agencies without relying on private lenders (60 percent from the credit association, 20 percent from the Government). Under the 1925 act, the Government loan was subject to an interest rate of 5.5 percent and to regular amortization after a grace period of 3 years at 1 percent per annum. The act of May 14, 1934, made such loans available at an interest rate of 4 percent, raised the limit to 30,000 crowns, extended the grace period to 5 years, and prescribed amortization within the following 30 years.

Loans for Land Improvement [48] and Related Purposes

Government loans to individual farmers for land improvement have been authorized since May 6, 1921, by various acts. As a rule they were made against third- and fourth-mortgage security with the parish or county authorities guaranteeing repayment. The maximum loan limit was 1,500 crowns, raised by an act of April 4, 1928, to 4,000 crowns. Amortization in 10 equal annual installments was to begin after a grace period of 5 years. The interest rate of such loans varied with the rate at which the Government was able to borrow: 6 percent until March 1923 and 5 percent from that date until March 1933. The

[48] Draining, irrigation, marling, liming, and the preparing for cultivation of heath and marshes.

act of March 31, 1933, authorized the Ministry of Agriculture to make land-improvement loans against junior-mortgage security to individuals not to exceed 4,000 crowns—in exceptional cases 5,000—and to land-improvement associations of farmers not to exceed 100,000 crowns at an interest rate of 4.5 percent, which however, was not charged during the first 2 years. After a grace period of 5 years, the loan was to be amortized in 10 equal annual installments. The Government could also pay subsidies amounting to one-third of the expenditures for material (drainage pipes, for example) and labor employed if the work was performed by persons taken from the relief rolls. Government loans for land improvement total around 70 million crowns, of which only a fraction has been repaid so far.

An act of February 26, 1937, shifted the function of making land-improvement loans to the credit associations. In a special bond issue for land-improvement loans totaling 10 million crowns, each association assumes a pro rata share corresponding to the size of its business (total amount of bonds outstanding). Following their usual practice, the credit associations make the loan not in cash but in bonds, and only after the improvement has been completed and approved by government committees. With the proceeds of the credit-association loan the borrower repays the short-term advances which commercial and savings banks were to make while the work was in progress. In order to protect the borrower against low bond quotations, a consortium of lending institutions consisting of several commercial and savings banks as well as one life-insurance company buys these bonds at 99. Land-improvement loans are now subject to an interest rate of 4.75 percent and to repayment in semiannual installments of one-fourteenth of the principal (7 years) if the loan is made for marling, which is a practice frequently necessary in Danish agriculture. In the case of other soil improvements, loans may be repaid in twenty semiannual installments after a grace period of 3 years, that is, in 13 years on the whole. The loans take priority over all others including any first mortgage that the association might have on the same farm. However, the Government has not disassociated itself completely from land-improvement financing since these loans may not be made unless the improvements as planned and completed have the approval of a committee appointed in every district by the Ministry of Agriculture. Too, the latter continues to pay one-third of the expenditures for material and labor as a subsidy.

Among the Government loans for specific agricultural purposes are 40- to 50-year loans against real-estate mortgage security for the erection of farm laborers' dwellings and for the purchase of building sites. These loans may cover nine-tenths of the cost involved. No interest is charged during the first year. If the loan does not exceed 1,500 crowns, one-fourth of it is free of the interest charge, which

is 4 percent. Loans or parts thereof subject to interest payment are amortized at the rate of 1 percent per annum. After that portion of the loan which is subject to interest payments has been paid up, the portion which is free of interest must be repaid at the rate of 2.5 percent semiannually.

Refinancing and Debt-Adjustment Loans

In 1925 the Danish crown had fallen to around 60 percent of its gold value. Legislation designed to reestablish parity was successful and by January 1, 1927, the crown was back on its pre-war gold parity.

The depressing effect which monetary deflation had on agricultural prices resulted in low net returns which, expressed as a percentage of the sale value of agricultural capital, were 1.5 percent in 1927–28 as against 6.4 in 1924–25. A similar situation obtained during the 2 years preceding 1927–28. The cumulative effect of these 3 bad years was that a large number of farmers were not able to meet their obligations and refinancing by Government loans was contemplated in the so-called crisis laws of March 31 and April 4, 1928.

Loans under the crisis laws were intended for liquidation of debts other than those secured by mortgages. They were limited to a maximum of 5 percent of the value of the property as assessed by the tax authorities and repayable in equal annual installments within 10 years after a grace period of 3 years. To finance the loans, the Government was to make a special bond issue, the proceeds to be accumulated in the "Producers' Loan Fund" (Erhvervenes Laanefond), created by act of April 4, 1928, consisting of an initial sum of 26 million crowns supplied by the Government and administered by the Ministry of Finance. The fund was designed not only to make the loans under consideration, but also to supply farmers' production credit associations (discussed below) as well as industrial enterprises and artisans with short-term credit. Losses arising out of its operation and payment of administrative expenditures were guaranteed by the Government. Advances were to be made as need arose to credit institutions (commercial banks and savings banks) for making loans to farmers. The maximum rate of interest charged the borrower by the credit institution was not to exceed by more than 0.25 percent the rate which it would have to pay the Government. Repayment of the loans was to be guaranteed by the credit institutions and as a measure to insure care in the administration of funds entrusted to them, they were required to bear 75 percent of the possible losses, while the Producers' Loan Fund was to assume the other 25 percent. However, shortly after passage of the crisis laws, prices began to rise so that practically no use was made of the refinancing provisions described.

Owing to the effects of the world-wide depression, which began to be felt acutely by Danish agriculture in 1930–31, Government refinancing schemes were resumed in conjunction with other farm relief measures.[49] This time, according to an act of April 28, 1931, mortgage loans for the purpose of liquidating mortgage and other indebtedness in excess of the full value of the farm were made from the Producers' Loan Fund to farmers directly after applications had been passed on and recommended by local authorities. One of the conditions for a loan was that the farmer must have reached agreements with his creditors on rather drastic scale-downs. As new loans were not granted in the case of arrangements whereby creditors would receive more than 30 percent of their original claims, the required scale-down amounted to at least 70 percent of the excess indebtedness. Furthermore, the new Government loans to refinance the adjusted indebtedness were not to exceed 8 percent of the appraised value of the farm and could not be larger than 6,000 crowns. Therefore, after the scale-down, total indebtedness including the adjusted debt was not to exceed 108 percent of the value of the property (real estate, livestock, and inventory). No definite rate of interest was fixed as it was expected apparently that the Producers' Loan Fund would have to change its rates from time to time. Repayment of the loan was to be effected during 12 years after a grace period of 3 years.

An amendment of November 22, 1931, softened the drastic scale-down requirements by providing that payment of 35 percent of the original excess indebtedness would be guaranteed to creditors if they agreed to let this portion of their claims stand as a mortgage on the property, junior to the Producers' Loan Fund mortgage, for 5 years and free of interest charges. Such a mortgage was to be due in full only in the event that the weekly quotations of butter and bacon during the 5-year period was 35 percent or more above the average quotation for the second semester of 1931; otherwise it was to be

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[49] Since 1931 a number of relief laws have been enacted. *Protection against foreclosures* on farm property for 3 months or more was authorized in November 1931, if the debtor submitted proof of an attempt to reach a compromise with his creditors or evidence that within a short time his financial condition could be expected to improve. *Moratoria on interest and principal payments* were granted by legislation enacted June 16, 1932, which provided for suspension of principal installments until December 11, 1936, and of interest payments for a maximum period of 2 years. Refusal on the part of creditors to accept moratoria were arbitrated by county committees for debt adjustment. If application of the moratoria was likely to impair the financial position of the creditor, so-called liquidation loans could be obtained from a fund established by the Mortgage Bank of the Kingdom of Denmark and the National Bank. *Relief from taxes* was granted to farmers by an act of October 19, 1931 (extended on June 22, 1932, until March 1933), provided that the indebtedness did not exceed the appraised value of the farm (real estate, livestock, and inventory). Tax payments were reduced by 2 percent of that part of the total indebtedness which exceeded the farmer's net capital (appraised value of real estate, livestock, and inventory minus total indebtedness.) Finally, various measures were taken to *raise prices of farm products* and to *lower interest rates*.

reduced accordingly. Thus, between new advances from the Producers' Loan Fund and the amount covered in standstill agreements. creditors could receive possibly 65 percent of their original claims. The amendment also raised the maximum limit of the advances from the Producers' Loan Fund to 10 percent of the appraised value and the absolute limit to 8,000 crowns.

Under a second amendment, or rather a supplement, to the act of April 28, 1931, passed on March 13, 1933, and commonly referred to as the "Moratorium Law," farm debtors who had been unable to obtain scale-downs and, therefore, were not refinanced by advances from the Producers' Loan Fund under the acts of 1928 and 1931 could obtain a compulsory composition and a 3-year moratorium on principal and interest payments on that part of the mortgage debt which exceeded the appraised value of the property. This measure applied also to personal debts, provided that the debtor's prospects for continuing operations were not hopeless. Claims for personal debts included in the moratorium were declared secondary to other debts covered by it.

The moratorium did not apply to first mortgage loans of credit associations, savings banks, and other institutions whose loans remain within the limits prescribed for the investment of trust funds for minors. Furthermore, if prices of butter and bacon rose substantially over the 1932 average, interest payments at 2.25 percent were to become due on certain portions of the moratorium debt, depending upon the extent of the price rise, as follows:

Percentage rise in prices of butter and bacon	*Percentage of moratorium debt on which interest is payable*
20	20
30	40
40	70
50	100

Increases in prices actually occurred so that the moratorium on interest payments become partly ineffective.

New loans were made from the Producers' Loan Fund to replace debts scaled down at least to 35 percent of the original claim and were secured by a mortgage having priority over the remaining claims covered by the moratorium. These loans were subject to terms laid down in the act of April 28, 1931, as amended on November 22, until an act of December 18, 1933, raised the absolute maximum limit of Producers' Loan Fund advances for liquidating voluntarily and compulsorily adjusted excess indebtedness with the original creditors to 8,400 crowns. Otherwise, the 1933 act restates by and large the principles laid down in the previous acts, which it supersedes, with some additions regarding legal procedures, etc. Interest rates on refinancing loans made under the 1933 act ranged from 4 to 4.25 percent. The total amount loaned under the legislation of 1931–33 is estimated at more than 50

million crowns. In 1938 when the outlook for Danish agriculture was comparatively favorable, persons familiar with the economic situation believed that very little, if any, of these advances would ever be repaid.

Despite the improvement of net returns from 1933–34 on, another refinancing scheme to consolidate junior mortgage and personal debts was put into practice by an act of April 9, 1936, as amended March 31, 1937. The amendment did not change the main provisions of the law; it merely granted protection against foreclosure pending approval of the application for a Government refinancing loan. Under this legislation, a sum of 100 million crowns was appropriated and placed under the control of a special debt adjustment loan committee (Udvalg angaaende Laan til Opnaaelse af Akkord og Gaeldssaneringslaan). Borrowers were eligible for *rehabilitation loans* from this fund only if their indebtedness amounted to from 85 to 110 percent of the appraised value (real estate, livestock, and inventory). Because of this stipulation and also because the amount of the loans individually or together with refinancing loans obtained under previous acts was not to exceed 25 percent of the appraised value, farmers having encumbrances in excess of 110 percent had to make scale-down agreements with creditors which would bring total indebtedness down to the required figure. An absolute maximum loan limit such as had been enforced in previous acts was not fixed so that the scheme became applicable also to the larger-sized farms. No loan was to be made if it appeared that even after debt adjustment the debtor would be unable to meet carrying charges. For their claims remaining after debt adjustment, creditors were given Government bonds which had a coupon rate of 4 percent and were acceptable at face value in liquidation of the claim, regardless of how much below par they might be quoted. The rate of interest on rehabilitation loans was also 4 percent, but, during the first 2 years of the duration, the Government assumed payment of sums equivalent to 3 percent. These Government payments toward interest were not an unconditional subsidy, because the borrower was obliged to reimburse the Government later if prices of agricultural products reached a certain higher level. No installments on principal were to be paid until 1942; after that year, repayment was to be 2 percent annually. Applications for loans under the scheme covered the entire 100 million crowns available. In the summer of 1938, loans actually made accounted for 76 percent of this amount. It was generally believed at that time that the Government would be given authority to advance additional sums for the same purpose, because the portion of the farm debt falling within a degree of indebtedness of 85 percent or more of the appraised value was found in 1937 to be 715 million crowns or 16.1 percent of the total indebtedness.

GOVERNMENT SOURCES OF MEDIUM- AND SHORT-TERM CREDIT

While most of the Government long-term and mortgage credit was placed at the disposal of farmers as a result of temporary emergency financing, the Government appears at least for the time being as a regular lending agency in the field of medium- and short-term credit.

Crop Loans

Crop loans, amounting to 7.8 million crowns in 1937, have been made by the Ministry of Agriculture every year since 1925 (act of April 3) to enable farmers to buy seed and fertilizer. The interest rate in 1938 was 4.5 percent. The loans are repayable as soon as possible after the harvest, and are secured by special crop mortgages having priority over any other debt. In the event of bad harvests, subsidies are granted to needy farmers for the same purpose.

Production Credit Associations (Driftslaaneforeninger)

To supply farmers with operating capital, an act of March 26, 1898, made available 5 million crowns to *production credit associations* (Landøkonomiske Forskudsforeninger). The Government gave these associations loanable funds for the duration of 10 years at the rate of 3 percent per annum. Association members were not to be charged more than 4.5 percent on their loans which were repayable within 9 months at the maximum and were made without specification of purpose. The maximum of such loans was 50 crowns per head of cattle,[50] not to exceed a total of 3,000 crowns per individual member. Except by special authorization of the Ministry of Agriculture, total loans of the association could not be made on more than 10,000 head of cattle nor on less than 1,000 head. A 1908 amendment to this law raised the interest rates involved to 3.5 and 5 percent, respectively.

A production credit association had to have at least 50 members who were farmers by profession and owned a total of at least 500 head of cattle. Membership in two or more associations was prohibited. It was acquired not by simply borrowing from the association, but by admission following a majority vote of the board of directors and by payment of an initial contribution to the reserve fund of one crown per head of cattle. The contribution, which did not bear interest to the member, could be paid in installments during the first year of membership. The board of directors included four association members, serving without pay and drawing only a per diem of 2 crowns for each board meeting, and a chairman—not necessarily a member of the association—who was approved by the district Government and also served without salary. The board was elected by the general

[50] This does not mean cattle actually on the farm. In keeping with the growing importance of the dairy industry, the size and value of a farm was expressed in terms of the number (head) of dairy cattle which would be considered normal for the property in question.

assembly of members, as were the two auditors of the association. The latter, unless they were members of the association, were allowed to receive an annual fee approved by the Ministry of Agriculture. Surplus earnings of the association were not distributed to the members. After allocation to the reserve fund until it reached 10 crowns per head of cattle and after repaying previous levies on members to cover losses of the association, surplus earnings were to be accumulated in a special fund intended to constitute the future loan capital of the association. Interest accruing on this fund, which was kept on deposit in savings or commercial banks, was supposed to be used for reducing the rate of interest on loans to members. Any deficit appearing in the annual balance sheet of the association made all members—borrowers and nonborrowers—immediately liable to the extent of half a crown per head of cattle owned, the remainder to be paid out of reserves which, however, were not to be reduced to less than half a crown per head of cattle. If the deficit required coverage in excess of these payments, each borrowing member was liable for the difference in proportion to the size of his loan. Dissolution of a production credit association could take place only after two general assemblies, held at an interval of 4 weeks, had sanctioned it.

Originally, it was hoped that the business of the 168 associations which were formed with a membership of around 22,000 farmers would develop to such an extent that full repayment of the Government advances would be possible within the prescribed 10 years. However, this was not the case. The 1908 amendment, therefore, established a plan of repayment by installments (one-fifth in June 1908 and one-tenth in each of the years following) up to 1916. As by that time most of the associations had not accumulated loanable funds of their own, they were dissolved upon liquidation of their debt to the Government. Those few which continued making loans from their own resources retained the privilege of exemption from stamp dues on the promissory notes of their members provided that they submitted to control by the Ministry of Agriculture. In the course of time, the associations which had survived went out of existence because around 1916 farmers became more interested in the development of a new source for short-term credit, i. e., the cooperative village banks.

It will be seen later on in the discussion of these institutions that they were not fully able to replace the production credit associations. And since the need for institutions which would supply farmers with certain types of operating credit in an organized fashion appeared to be rather definite, the principle of farmer cooperation in this respect was revived again. Thus, the *production credit associations for small farmers* (Driftslaaneforeninger for mindre Jordbrugere) were created by an act of March 18, 1925. By 1938 there were in

operation around 85 such associations with a membership of approximately 30,000 farmers. Members may be only farm owners or tenants, operating on an area worth not more than 12,000 crowns as appraised by the tax authorities, that is, mainly those farmers who do not have more than 10 hectares (24.7 acres) of land. There is an initiation fee of 2 crowns which goes to the reserve fund of the association. Another membership requirement is the pledging of amounts ranging from a minimum of 25 crowns to a maximum of 500 crowns to secure the liabilities of the association. Payment of the pledges is demanded only in the event of the association's inability to meet its obligations. Associations must have at least 100 members. For a smaller number, special authorization from the Ministry of Agriculture is required. Membership is permanent, even if no loan is obtained, unless the member resigns by giving 3 months' notice after having been a member for at least 5 years. Beyond the loan sum received and the amount of their pledges, members are not liable for obligations of the association. If after exhaustion of the reserve fund there is a deficit, half of it is borne by the members within the limit of and prorated according to the size of their pledges and the other half by the Government. The reserve fund consists of accumulated initiation fees, voluntarily paid-in pledges, and accumulated surpluses. It must be deposited with a commercial or savings bank in an interest-bearing account. Profits of the association, which may arise out of the spread between the rate of interest at which the association obtains loanable funds from the Government and the interest rate charged to borrowers, are not distributed to the members but form part of the surplus which must go to the reserve fund. Borrowers are charged a higher interest to take care of the administrative expenses of the association but the Government may make annual contributions to the administrative expenses not exceeding 1 percent—until 1935, 0.5 percent—of the loanable funds placed at the disposal of the association. Management of the associations is vested in a board of five unpaid directors, elected for 2 years by the membership and under supervision of the Ministry of Agriculture, which also inspects the annual balance sheets after these have been checked by two auditors not necessarily members of the association. Until 1935 the auditors were not supposed to be paid. Unfavorable loan experience of several associations prompted the Government to increase its contribution to administrative expenses and paid auditors and accountants are now being employed.

The lending apparatus is comparatively simple in that the Ministry of Finance supplies the associations with loanable funds up to 80 percent of the total of member pledges for the duration of 11 years out of appropriations from the National Loan Fund (Stats-Laanefonden). These totaled 1 million crowns during the fiscal years 1928–29 to

1934–35 and 850,000 crowns during 1935–36 to 1939–40. No payment on principal is required during the first year, repayment occurring in 10 equal annual installments thereafter. The interest rate—until 1935, 4.5 percent—is now 4.25 percent. Borrowers may be charged 5.5 percent interest, a maximum spread of 1.25 percent being allowed for cost of administration and for accumulation in the reserve fund. If the Ministry of Finance should find it necessary to raise the rate of interest to the association, the spread may not exceed 1 percent. In 1938 the rate to association borrowers was 5.25 percent. The maximum amount of a loan to any one member is 1,000 crowns. Loans are made only to association members for the specific purpose of purchasing horses, cattle, hogs for breeding, and nonstationary agricultural machinery and equipment, repayment to take place in installments fixed by the management within 3 years as a rule; in the case of horses and machinery, the duration may be extended to 5 years, provided the membership unanimously approves this policy. Control over the use of the loan is exercised in a peculiar fashion; the association instead of giving the borrower cash, buys the required item and resells it to him on the basis of a purchase contract which reserves the property rights to the association until the item is paid for in full. The borrower has to make a first installment or down payment on the item equivalent to one-fourth of the purchase price. It seems that despite unsatisfactory developments in some of these associations, the scheme has worked out fairly well considering the economic difficulties encountered, particularly by the small holders.

Since 1928 the production credit associations for small farmers have had a central organization (De samvirkende Driftslaaneforeninger for mindre Jordbrugere), which is merely a union to further and protect in a general way the interests of the 85 member associations without having any technical function in the lending process.

Production credit associations for owners and tenants of farm property (Driftslaaneforeninger for Ejere og Brugere af Landejendomme) were organized under an act of March 31, 1928. Numbering 190 in 1938, they serve those farms which need more than the 1,000 crowns of operating credit granted by the associations for small holders and are valued at more than 12,000 crowns, that is, the large- and medium-sized farms with the upper stratum of small farms also participating. Membership is acquired by borrowing and is restricted to one association. It is, of course, also impossible to belong to one of these associations and to one of the small farmers' associations at the same time. The administrative organization of the associations is similar to that of the associations for small farmers. However, only 30 members owning at least 300,000 crowns worth of land are required to form an association. Furthermore, since all the work done on behalf of the associations is to be free of charge, no spread between

interest rates paid on government advances and rates charged the borrower is provided for.

As far as can be ascertained, the associations for owners and tenants have not been as successful as the associations for small farmers; in fact, the advisability of gradually dissolving them or at least of merging them into 28 associations by administrative districts has been discussed. In the main, financially weak farmers are willing to join, while farmers in a healthy financial position are reluctant to do so because unlimited liability for losses required of the members involves too great a risk. As was seen above, in the production credit associations for small farmers the liability is limited. Although the government fund financing the associations for owners and tenants contributes a sum equivalent to 5 percent of every loan made to their respective reserve funds, the members are jointly and severally liable for the loans as well as for interest payments. If, at the end of the fiscal year, there is a deficit which cannot be covered by the reserves (consisting of the 5 percent payments from the government plus 5 percent of the principal to be paid by the borrower when the loan is closed), the remainder of the deficit is to be made up by the members in proportion to the value of the land owned or rented by them. Not only does this ruling oblige a large farmer to pay large sums on behalf of others regardless of the amount he borrowed, but it is also an incentive for borrowing to the utmost. In addition, the fact that ultimate use of the funds is not specified strictly may prevent financially strong farmers from joining. In response to applications for credit in general "to cover current expenses incurred by the operation of farms" (wording of the act), loans are made in cash which the borrower is free to use according to his own ideas. Thus, one member does not know whether the funds lent to others, whose obligations are covered by his joint liability, are used for a sound purpose. In the associations for small farmers, the member is sure that the loans to other members, for which he is jointly liable, are not only used for a specific purpose known to him but are also backed by a tangible security, such as the horse or the machine purchased. In the associations for large- and medium-sized farms, the only safeguard is that the loan cannot exceed 15 percent, in exceptional cases 20 percent, of the value of the land as appraised by the association and certified by the village council. But the risk to the member is not greatly reduced by this ruling as the act does not contain definite instructions for appraisal and leaves ultimate determination of the amount of the loan to the management of the association. Such maximum loans may be added on the security of the farmer's promissory note to an already existing mortgage debt.

Loans are made by the associations for periods of 5 to 12 years, the latter being the duration most frequently stipulated. Interest rates

are variable depending upon the rate the associations are charged by the Government in a particular year. Of course, the rate at which the loan was closed remains in force during the life of the loan. In 1938 the rate to borrower-members was 5.25 percent. The associations themselves obtain loanable funds from the Producers' Loan Fund (Erhvervenes Laanefond, discussed above, p. 53) not to exceed 12 million crowns altogether. The amount which any one association may receive is limited to 10 percent, in emergency areas to 15 percent, of the aggregate value of the land owned or rented by the members. The interest rate charged by the government corresponds to the lowest rate at which it can borrow. The loans are repayable within 12 years. During the first 2 years, no principal installments need be made; thereafter, amortization in 10 equal annual installments is required. In most cases, this is also the repayment plan employed by the association for the individual borrower.

PRIVATE SOURCES OF MEDIUM- AND SHORT-TERM CREDIT

Various Lenders

As was seen on page 17, *merchant credit* constitutes around one-third of the medium- and short-term debt. The interest charges on such credit may not exceed 6 percent per annum according to an act of April 6, 1906, and it seems that the usual rate, or the difference between cash and time price, is from 4 to 6 percent. Interest on cash loans by *private individuals* naturally varies from low to high rates, but 5 percent is believed to be the rate most commonly stipulated in recent years.

Medium- and short-term loans from banking institutions offer no unusual technical features that would be of particular interest. *Savings banks* as well as *commercial banks* discount notes, make loans on stocks and bonds offered as security, and on personal security. The last-mentioned type of loan is most frequently adopted by the savings banks, which require two or possibly more cosigners. These loans appear to have a fairly long duration, for a study made in 1903 revealed that the majority of savings bank loans consisted of loans guaranteed by cosigners and repayable within 2 to 10 years.[51] Commercial banks also make loans guaranteed by cosigners but perfer granting those secured by promissory notes, which may be renewed every 3 months. A small commission is charged at the time of renewal. Durations of commercial bank loans are much shorter than those of savings bank loans. The rates of interest on savings and commercial bank loans vary, of course, with the general level of money market rates. In 1938 they were from 5 to 7 percent, with 6 percent being the most frequent rate.

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[51] (*28, p. 113.*)

Cooperative Village Banks (Andelskasser)

Although cooperative enterprise has penetrated practically every phase of Danish farm life and made Denmark outstanding as regards organization and extent of practical application of agricultural cooperation, it is surprising that in the field of medium- and short-term credit cooperative societies of the Raiffeisen type, which play such an important role in the agricultural credit system of neighboring Germany, have not achieved a similarly significant position. In explanation, it may be restated here that the demand for seasonal operating credit is less pronounced in Denmark than elsewhere owing to the livestock economy features of agriculture, and that probably a considerable portion of such operating and production credit as is needed consists of mortgage credit, obtained mainly from the mortgage credit associations which in a way are to be classified as cooperatives. Nevertheless, locally active credit cooperatives, commonly known as cooperative village banks, were formed with the object of granting small short-term loans to their members from funds deposited by them, profits from this business to be distributed in the form of interest on deposits rather than as dividends on the share capital. In this respect, the village banks closely resemble the Danish savings banks. But there is an essential difference in the liability of the members. The membership of village banks is divided into an active and a passive group. The latter group includes those who work with the village bank without owning shares and, therefore, have no liability, while the active members are jointly and severally responsible for their institution without limitation. The general assembly of members, in which each active member has only one vote regardless of the amount of shares held—physical presence being required for voting—elects a committee of members to appoint the management of the bank. Passive members have no vote, but enjoy the right to participate in the discussion of the general assembly.

The first village bank was created in 1915, and at that time great hopes were entertained for the new institutions. "The following year seven others were formed and during the next 6 months, 7 more. It looks as if another cooperative movement, started in the West of Jutland, is going to sweep over the country as the cooperative dairy system did a generation earlier." [52] The number of village banks in 1930 was reported to be 150.[53] However, many of the banks were dissolved, particularly during the depression, so that in 1938 they numbered 81. To some extent, these banks were expected to take the place of the early production credit associations (Landøkonomiske Forskudsforeninger), most of which had been dissolved in 1916, but in the course of time they have developed more into general banking

[52] (*14, p. 151.*)
[53] (*3, p. 181.*)

institutions, especially money clearing centers, than into specialized loan banks. As the individual Danish farmer belongs to a great number of different cooperatives at the same time, his financial relations with them in either making or receiving payments result in innumberable and probably costly cash transactions, which are conveniently centralized in the current accounts maintained by the village bank for active as well as passive members. In fact, the village banks introduced the use of checks in rural areas. Such centralization of funds also enables the banks to function more effectively as general lending agencies and to prevent capital from leaving the locality through other forms of investment. It appears that the village banks more or less fill in where other lending or banking facilities are lacking. The rates of interest charged on short-term loans are about the same as those charged by other private banks.

In 1921 they formed a national union—called "Danish Village Banks" (Danske Andelskasser)—to which about 65 percent of the individual banks belong. The central institution has no financial functions; it assists the affiliated banks in solving problems of organizational nature and of bookkeeping, provides annual auditing of their balance sheets, and acts as their representative on the Central Cooperative Committee. In 1917 a Federation of Danish Cooperative Societies was formed. The Central Cooperative Committee, consisting of 26 members elected by the Federation's annual meeting of delegates, is the executive organ of the Federation.

The Bank for Cooperatives (Andelsbanken)

Distinct from the scheme of supplying the individual farmer with credit through cooperative lending institutions is that of financing all farmers' cooperatives through a central bank. In 1909, 237 cooperatives agreed after preliminary consideration of the matter during the preceding 10 years and despite strongest opposition from private banking circles to furnish capital for such an enterprise, namely, the Bank for Cooperatives (Den Danske Andelsbank) which established headquarters first in Aarhus, later in Copenhagen. It was hoped that the bank would be greatly strengthened through a new credit union movement, for individuals could participate by forming so-called bank clubs which would take shares in proportion to the number of individuals in the club. Even some of the existing savings banks, which are not cooperative societies in the true sense of the term, became shareholders of the bank for cooperatives. "The object of the bank was to obtain higher prices for bank drafts in sterling or mark, to grant cheaper loans and allow higher interest on deposits, but primarily to be ready to support every reasonable cooperative scheme submitted to it." [54]

[54] (*14, p. 148.*)

Although the bank was to serve primarily as a central financial institution doing all kinds of banking and loan business for the shareholding cooperative societies (including the village banks) and affiliated savings banks, it appears that direct loans to individual farmers were also contemplated.[55] In addition, the bank was authorized to do general banking even for nonmembers. It was owned by the members, who were liable to the extent of their shareholdings. Dividends on the share capital were fixed at 4 percent. The annual surplus beyond fixed dividends and allocations to reserves was to be distributed to members in proportion to the amount of business transacted for them by the bank, with which they were not compelled to deal exclusively. For several years after beginning operations in 1914, the bank for cooperatives was successful and became one of the five largest banks in the country. The financial strain of post-war deflation is blamed primarily for its liquidation, which occurred in June 1925. Since shareholders were repaid about 92 percent of their investment it would seem as if the difficulties of the bank had been overrated and there was not much justification for its liquidation. In fact, the unwillingness of some member cooperatives to participate in underwriting the losses for which they were in part responsible themselves has been called one of the sore spots of the Danish cooperative movement.[56] However, to some extent fear of bad management and further losses seems to have been also responsible.[57]

In November of the same year, a similar institution was credited, namely, the "Danish Cooperative and Folk Bank" (Den Danske Andels og Folkebank or more recently, Andelsbanken). In 1937 around 1,300 cooperative societies and 7,500 private individuals were shareholders and the bank had 34 branch offices throughout the country. The business of this institution has grown steadily in recent years, particularly because of the support it has received from agricultural cooperatives and also because it is apparently operated as a profit-making private bank having cooperatives as shareholders rather than as a bank for financing cooperatives with the idealistic aim of promoting cooperation in general. It is organized as a cooperative, the liability of the members being restricted to the amount of shares held. The general assembly of shareholders in each district elects representatives, that is, 30 altogether, who in turn elect the Board of Management consisting of 7 persons. The latter, together with the 30 representatives, appoint the executive directorate and the auditors of the bank. Dividends are distributed on the basis of the members' annual business with the bank.

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[55] (*13, p. 167.*)
[56] (*18, p. 344.*)
[57] (*10, p. 172.*)

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